

Please
handle this volume
with care.

The University of Connecticut
Libraries, Storrs

hbl, stx


HD 6961.B3

Adaptive human behavior;



3 9153 00504972 3

HD/6961/B3



Digitized by the Internet Archive
in 2012 with funding from
LYRASIS Members and Sloan Foundation

<http://archive.org/details/adapthuman00bakk>

ADAPTIVE HUMAN BEHAVIOR

ADAPTIVE HUMAN BEHAVIOR
An Outline for the Study of Human Relations.

By
E. Wight Bakke

Yale University
Labor and Management Center
1950

New Haven, Connecticut

331.1
B179

Copyright 1950
by
Yale Labor and Management Center
Printed in United States of America.

C O N T E N T S

	INTRODUCTION	vii
	I. THE PROBLEM	1
	II. STARTING POINTS	3
	III. INTERPRETING HUMAN BEHAVIOR	28
	IV. SUMMARY OF PROPOSITIONS RELATIVE TO ADAPTIVE BEHAVIOR	54
	V. IMPLICATIONS FOR ANALYSIS OF OBSERVED BEHAVIOR	59
	APPENDIX: Note on Development of Structure of Living	69

INTRODUCTION

The Yale Labor and Management Center late in 1944 launched a number of research projects with respect to the economic, social, and psychological problems of relations among management, employees, and union leaders. As indicated in a previous publication, Plans and Progress, the objective of this research was not merely to analyze practical problems, but to contribute to the development of sound and useable principles of human relations. In short it had a theoretical as well as a practical purpose. In order to coordinate all research projects around this objective, to provide a framework for the analysis of determinants of human behavior, and to set up guideposts to a road along which useable theory might develop, I summarized in 1945 in Adaptive Human Behavior, the framework for analysis which had proved useful in my studies of unemployment and industrial relations at the Institute of Human Relations since 1931.

This is the third revision of that publication in the light of experience in using the framework as a basis for research. It is issued now primarily for the use of our research staff and of our students. A number of social scientists and leaders in management and unions have expressed interest in it, and it is therefore given a limited private circulation. It should be remembered, however, that it is a research tool to be sharpened and improved by continued use and criticism. It is in no sense a theory, but rather a framework for classifying and analyzing observations of behavior and its determinants in the process of developing a sound and practicable understanding of why men behave as they do.

It would be difficult to identify this framework as one relevant to any one social or psychological science. The influence of my specific training in Anthropology, Sociology and Economics is clearly discernible. I have had close association with the psychologists at the Yale Institute of Human Relations and have gained much from that relationship. But my amateur status in the field of Psychology is obvious. As a result, the framework will probably satisfy the rigid departmental standards of no one of these disciplines. I am not unconcerned about this, and trust that the use of this framework as a research tool, will not only demonstrate its specific weaknesses for classifying and analyzing data considered significant by representatives of all these sciences, but will suggest the lines for its correction.

In the meantime, I would hope that this preliminary effort could be judged in relation to the objective which stimulated it. I have since 1931 been professionally occupied in observing and trying to explain the behavior of workers, managers, and union leaders in going organizations, in the midst of existing natural and social environments, and in the attempts to solve the problems of opportunity and obstacles faced by them. Strong as was the temptation and apparent as was the value of recording and analyzing field observations within

the framework provided by any one science, I determined not to do so. Rather I decided to follow where the problem and data led, both in the construction of a framework for its classification and in the development of hypotheses from its systematic analysis. The attempt has produced at least this satisfaction, namely that the framework fits the data that has turned up in my own research, and it has led to the formation of generalizations useful in interpreting it.

Such an attempt and its product are rightly open to criticism from those who have been more faithful than I to the scientific assumptions, premises, and methods of a particular discipline. Yet one might hope that they would be stimulated not only to consider any inconsistencies of this framework in the light of their detailed knowledge of their own field, but to assess the validity of their own framework in the light of this one.

Moreover, I have had in mind, in this attempt, not only my fellow scientists, but those practical managers and leaders of men who are facing every day the reality of human relations in an industrial society. Problems of human relations enter their area of operational responsibilities as such, not as problems in Psychology, Sociology, Economics, Anthropology, etc. Their need is to see the problem steadily and to see it whole, though their solutions may utilize the techniques of now one, now the other of these disciplines. But first they must diagnose their problem. Their instrument of diagnosis should be able to take account of the full range of elements which have made that problem what it is.

Primarily for this latter group, but also for the student and social scientist, I have sprinkled the text with numerous detailed illustrations of the specific content of terms and generalizations. Most of them are drawn from field data which I have personally gathered or whose gathering I have supervised. This is dangerous business, for such illustrations may be taken as the total substantial content of the term or generalization and an inadequacy in the latter therefrom inferred. Yet I have preferred to risk the challenge of such inferences by bringing the terms down to earth rather than to seek the security of obscurity. For no term or generalization is scientifically or practically justified, and certainly not useable, if it does not fit the facts to which the terms give a label or about which the generalization is made.

I

THE PROBLEM

There is nothing new about the interest of men in human relations. There is probably no subject which has, from the appearance of human beings on the earth, interested men more, no subject upon which they have accumulated more practical and popular ideas than this. The folklore, and literature of every clan, tribe, community, and nation records insights from experience and speculation. The stock of ideas and wisdom of experience of every individual is dominated by generalizations on how to get along with, how to stimulate, control and predict the reactions of other people. Every individual has a diploma or an advanced degree in this subject from the University of Hard Knocks.

It seems presumptuous, therefore, for any person or group of persons to make a speciality of this subject upon which people are so universally informed, and to suggest that the application of the method of science to observation, experimentation, analysis, and generalization can produce insight and understanding which is a desirable supplement to the amount now available. Any one who does so must be prepared to face that challenge of presumptuousness and to be sincerely humble in the presence of that vast accumulated common sense.

Particularly must those who are ambitious to undergird the practice of human relations with dependable and useful scientific principles, such as those available to the doctor and the engineer in their own field, be ready to recognize the large element of truth in the oft-repeated comment, "Human relations is an art, not a science." Moreover they must be prepared to find their limited and conservative stock of tested hypotheses less attractive and challenging than the noble insights of the great moral leaders of the race, and the experienced-backed practical principles of successful leaders of men.

Yet it is my conviction that there is a real service these scientists can perform, particularly if they start with Huxley's definition of science as "organized common sense." That possibility of service grows out of several characteristics of the accumulated body of wisdom referred to above.

First of all the insights and generalizations contained therein are not universally consistent with each other even within the same culture. Any one with a wide knowledge of the history and present condition of thought will realize this. Attendance at a single conference of management, union leaders, teachers, or political leaders will reveal not only marked differences of opinion about appropriate techniques of human relations, but decided differences in the conception of the principles of human nature and social organization which suggest these techniques. Faced with inconsistency or conflict, on which generalization does one count? Is not systematic testing and exploration in carefully selected situations indicated?

Secondly, men are constantly facing new problems of human relationship which are produced by circumstances that have not been duplicated in their past experience. They come into contact with people, for instance, union leaders

government bureaucrats, and peoples of different races and cultures, with whom they have never dealt before. Or they move out of the operation of a relatively small intimate type of business or industry to a share in the management of a large corporation; or from leadership in relatively small and weak unions to that in large, powerful, and influential unions. If men are to be well guided by common sense, it is well to remember that common sense is simply a mirror of common experience. Experience develops sense for understanding the sort of facts with which experience has dealt. Is there not value in developing a systematic way of analyzing growing and changing problems of human relations, if for no other purpose than to indicate where the wisdom of past experience is applicable and where new principles of action are called for?

Another characteristic of this accumulated body of insights and practical wisdom is that most of it refers to relations between man and man as individuals. It ranges from the most popular statements of the "how to make friends and influence people" sort to the most exalted formulations of ethical and religious codes. Without the slightest intention of minimizing the significance of and necessity for this conception of the principles of human relations, it is clear that in a highly complex and organized society there are other aspects of human relations of which we know far too little. These aspects are concerned with the principles of group life and behavior, the operation of groups, of teams, of institutions as something more than the sum of their individual human parts, and the process by which individuals absorb unto themselves the characteristics, compulsions, and aspirations of the groups of which they are a part.

In this most critical and significant area of human relations our wisdom of experience is meager and confused, and what we have is either developed by analogy from principles of personal relationships and individual behavior, or from abstract and impersonal organizational theories which have all but neglected the fact that the substance of an organization is the social behavior and relations of its people. Here is a large and important field for systematic scientific exploration.

Another characteristic of the accumulated wisdom of the race is that the generalizations in which it is expressed are derived from observations of varied types of data and by different methods. Historical analysis, introspection, rigorous experimentation with rats and babies and adult subjects, mysticism, literary efforts, economic model building, description and analyzing of primitive societies and contemporary "problem" groups, philosophical speculation, practical experience in running a church, a union, a company, or a political party, produce generalizations which jostle each other with claims to being sound principles of human relations. Faced with such a variety, one can "take his pick," or he can set about the arduous task of seeking a common definition of the problem, a framework into which all observations of behavior expressions and determinants fit, and the rudiments of a theory upon which cumulative knowledge and wisdom may be built.

It is with these considerations in mind that it seems reasonable in the service of scientists and practical men alike, to attempt the development of a framework for classifying the facts of human behavior and its determinants and to suggest how the observed facts, so classified, can be used to understand why people behave as they do.

II

STARTING POINTS

First things first. As a start we shall have to agree on the nature and structure of the thing we are studying. When we study human relations in a company or union what fundamental picture do we have in our minds of that company or union? One of the things that has kept our many observations from adding up to a set of useable principles is that we don't all have the same basic picture. To some a company is a production line, to others a big family, to others a crowd of difficult but promising individuals, to others a list of numbers on a payroll, to others a group of supervisors and employees. To some a union is a group of members, to others a revolutionary association, to others an insurance company, to others an army, to others a department of the enterprise, etc. Because they start off with different pictures, their observations have a different focus, and when they are through the reports don't fit together so that general principles can be formulated.

Imagine how far we would get in improving our knowledge of physical health if doctors and medical scientists couldn't agree basically on the nature of the thing they are studying, the human body. Suppose some of them looked on it as an organism, others as a machine, others as a gaseous compound, others as a battleground for devils and angels!

Let me try to make this problem clearer by an analogy with the sort of diagnosis and report my doctor gives to me after my annual check-up on, shall we say, my "physical relations." Here is what he is likely to say: "Your circulatory system seems to be in good order. Your blood pressure is okay. The blood itself is what it should be. Your respiratory system is okay. Your sight and hearing are about standard. Your digestive system is weak only in one respect - you don't seem to handle fats too well. We'll have to look a bit more into that. It may be your liver isn't functioning just right. You're a bit overweight for your height and age. Your nervous system seems in good shape. There are no irregularities in your bodily structure that indicate any internal growth, etc. In other words, old chap, you are, on the whole, in excellent health."

The thing to notice about his report is that the doctor analyzes my degree of health - my physical-mental relations, that is - systematically. His system is grounded in a definite conception of the nature and structure of the thing he is studying, my body. That body as he looks at it is an organism, a group of living cells and organs working together as a unit. And that working together is accomplished through the operation of a number of organizational devices, the circulatory system, the respiratory system, the digestive system, the nervous system, etc.

Now when we attempt to check up on the health of the human relations in a company or a union, what is going to be our picture of the nature and structure

of the thing we are studying? That picture will determine what we look for, how we analyze and organize our findings, and whether we report our investigation in a way which is practical in helping to maintain or improve the health of those human relations. Those of us at the Yale Labor and Management Center have come to a conclusion on that matter which guides our research. It is a conclusion which grows out of not only our training in social and psychological science, but our studies of companies and unions, and our practical experience as consultants and arbitrators. It is a conclusion we share with a number of our colleagues in other universities. I think it will click with the experience of men of action. It is very simple.

Nature of the Object of Study

A company or a union is a small "society." That society has a character of its own. Members of that society behave and are related to each other according to patterns of behavior that characterize that society. They make use of the particular human, social, and natural resources available. Members enter and leave that society. People are basic units. But the study of the society which has 1000 members is more than the study of 1000 people. The society itself has structure; it furnishes a framework of goals, resources, and reinforcements within which the people live.

Both the scientist and those responsible for the operations of that company or union are constantly trying to describe, explain, and predict the behavior of participants in those organizations. Whether they are giving attention to the behavior of the group as a whole or to that of specific individuals, the fact that such behavior takes place within this particular societal structure and framework, and is suggested and conditioned by it, furnishes them with an extremely important clue. For, as we shall see, the action and thought of every individual participant is stimulated by and adapted to the elements available to him because he is a member of this "society" and not some other. Indeed much that he does and thinks will simply mirror the action and thought expected of him as a member. Even when he departs from that expected pattern, his "invention" must be geared into that pattern. And the possibilities of thought and action are affected in a major way by the goals, resources, and reinforcements, that is by the "Structure of Living," available.

When we use the word "society" in the following discussion, we shall be using the word to refer to organized groups of people living and working together within the "Structure of Living" characterizing that group. We do not use that word merely with respect to community or national groups. Our specific reference is to companies and unions. Our justification for referring to these more limited organized groups and societies is that the structure and framework of such groups can be described by using the same general categories as those used to characterize a national society, and filling them with the specific content of the facts of life in the particular group.

The Structure of Living

We want to determine why people living within a particular company or union society behave as they do. Our first task is, therefore, to describe the structure of living of people in that society, to provide a framework of analysis into which we can fit all factors which those people experience and which make their impact felt on their behavior. In general these factors are of three sorts, the goals which people want to achieve, the resources available for that purpose, and the reinforcements used to stabilize the resulting behavior (philosophy, slogans, symbols, etc.). Our picture of the Structure of Living for people living within a given society therefore will represent their behavior as resting on a foundation of certain resources, pointing toward certain goals, and stabilized by certain reinforcements.

In other words, our framework of factors is suggested by an initial assumption that the behavior of people is what it is, first, because they want to reach certain goals, second, because they have to use the particular resources available to them in doing so, and third, because the regularity of that behavior has been promoted by reinforcements which justify and stabilize it. The framework, or Structure of Living must provide for a classification of these goals and resources. These we must understand before we can interpret the dynamic facts of observed behavior itself, how it is learned, encouraged or discouraged, and modified and curtailed.

This Structure of Living can be portrayed from two points of view, that of the individual and that of the group, say all the participants in a particular company or union. That is we can say that the individual has a set of goals, resources, and reinforcements which are personally comprehended and experienced by him. But we can also say that all members of the group have in common certain goals, resources, and reinforcements, the experience of which is shared with other members of a particular group. For each participant there is an individual Structure of Living. For all participants collectively, there is a group Structure of Living.

The differences between the two will be pointed out as we proceed. We shall discuss first the Structure of Living of the group, say the participants in the company or union. The differences between the group Structure of Living and that of any particular individual will then be pointed out. It will be noted that the major bases for differentiation are two. Any particular individual does not come into personal contact with the whole range of elements in the group Structure of Living of the society. At the same time the elements in his personal Structure of Living are only partially supplied by the particular society (company or union) under consideration. He is a member of other societies, organized groups, community, nation, etc. which supply additional elements. The bearing of these differences on the behavior of people we shall discuss later.

It will be clear as we proceed, that the Structure of Living is being described as an actual set of elements available to a group or to individuals to solve their problems of living. These problems may arise from a condition

within the Structure of Living itself or from one external to it, or from a combination of both. For example, it might arise from an unsatisfactory structure of authority within the group (the company or union) or from a new law passed by the legislature redefining rights as between those occupying different positions in the authority hierarchy in any such group. It is likely, however, that, whether the original stimulus to problem solving behavior is provided by an internal or by an external condition, it calls for adaptive action utilizing or modifying the Structure of Living itself. This matter we shall deal with when we come to the discussion on adaptive behavior.

We wish to focus attention upon the Structure of Living as a problem-solving device, available to and being developed by a particular group or individual. We classify the elements in that Structure of Living as (a) Resources, (b) Goals, (c) Social Behavior conditioned by both, and (d) Reenforcements which support all three. It is within this structural framework that people in a society act and think in relationship with each other to work out the solutions to their group or individual problems and to implement those solutions.

Resources

Let us consider first, then, the resources which furnish the people in a society with opportunities their behavior is designed to exploit and obstacles it is designed to overcome, that is those opportunities and obstacles internal to the particular Structure of Living involved. These can be classified as human, social, and natural resources. Each of them can be represented on a diagram as a layer of foundation stones for behavior.

Human Resources

Human resources are the personal qualities and abilities of the members of the society. In general, they are of two types. The first type has to do with substantial qualities and the second with substantial abilities of persons. Examples of the two types follow:

Substantial qualities of persons include: Physique, Mentality, Emotional equipment which are recognized as essential qualities by everyone. Religious people would identify another such quality as "Spirit" though it has never been possible to define this quality in objective, and therefore in scientifically manageable terms.

It is possible to make meaningful summary statements concerning the physical, mental, emotional, and spiritual qualities of the members of a society. We can say, for instance, that the people in Company X or Union Y, are strong and healthy; that they are a very intelligent group; that they are emotionally stable; and that they are spiritually sensitive. When we do so we are making statements which indicate the nature of the first type of human resources available in that company or union "society."

Substantial abilities of persons in the use of these qualities include:

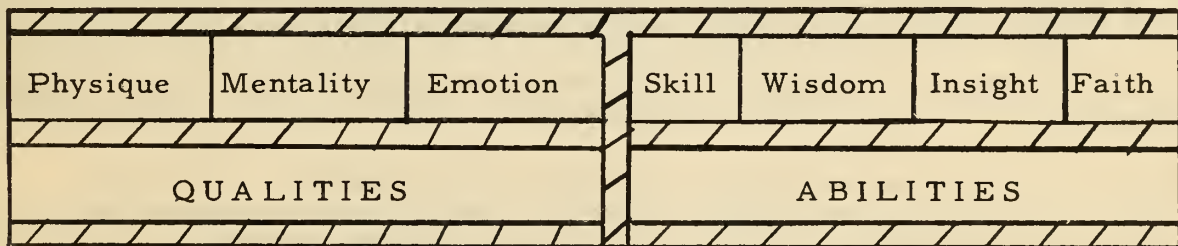
Skills (ability to deal with people, including the self, with materials, and with ideas, and to solve the problems they present); Insights and perception (ability to grasp meanings of people, ideas, and materials and their relations and behavior); Wisdom (ability to exercise true discernment with respect to people, ideas, and materials and their relations and behavior); Faith (ability and power to sense the reality of spiritual forces and phenomena and to marshal them as sources of strength).

It is possible to make meaningful summary statements about the human resources embodied in the people in Company X or Union Y such as the following: "They are highly skilled in technical processes, but not in handling of people or the use of ideas. Their perception of the real nature of people is shallow and confused. They lack wisdom in discerning the relative importance of materials and people. Their faith is hazy and weak." When we do so we are making statements which indicate the nature of the second type of human resources available to a company or union society.

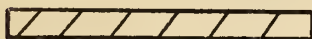
In the individual's Structure of Living, these human resources are those which define his own qualities and abilities, whereas in the group's Structure of Living, as we have seen, the human resources are a summation of these existing in the members of the society. Actually the description of such resources embodied in the personal qualities and abilities of all people in the entire group will be summarized in the description of the resource, People, which is a part of the next layer of social resources.

Differences in these qualities and abilities will be reflected in differences in social behavior. It is obvious, for instance, that people who are physically strong and healthy will act in ways different from those who are burdened with debilitating disease, or that those who are highly emotional will act in ways different from those who are phlegmatic.

We may represent these human resources as a first layer of foundation stones held together, and related to the social and natural resources, by the mortar of the character of the people.



HUMAN RESOURCES


Character

Social Resources

Social resources may be classified as People, Materials, and Ideas and the bonds or devices of organization which weld them together.

Having already discussed human resources in the group's Structure of Living in terms of the summation of personal qualities and abilities of members of the society, it may seem strange to list People as a separate social resource. There is, however, no anomaly in this procedure. In the first place it is necessary to provide for this layer of human resources to take account of the specific qualities and abilities of an individual and these certainly have a peculiar and non-duplicated part in his individual Structure of Living. Moreover, we have already indicated that the total amount and character of these abilities and qualities present in all individuals in the group will be summarized as part of the content of the resource, People. These personal characteristics appear to members of the society as individualized bundles of these qualities and abilities, in the form of other persons having distinguishable personalities. While the general stock of these elements is a conditioning factor on social behavior, the individualized bundles of these elements in particular people and their proportions present every member of the society with social resources in the form of other people. People as individuals furnish the society and its participants with either obstacles or opportunities in attempts to realize goals.

In describing the resource, People, we would begin by summarizing the data on human resources in terms of numbers and proportions of member individuals possessing particular degrees of the qualities and abilities.

In describing the 1000 people in a society we can, for instance, report proportions characterized by certain physical conditions, levels of intelligence, emotional disturbances of various types, and proportions possessing the several abilities we have named.

Two other descriptive categories, however, are necessary to report those characteristics of People, which are derived from their socially significant identifications with particular groups. The first category provides for biologically derived identifications. It includes sex and age. The second provides for social grouping identification. It includes such subdivisions as, racial, clan, religious, class, income, or other ascribed or achieved identifications relevant to the relationships of the people in a particular society.

In defining the resource, People, then, we would report proportions of individuals:

- a. Possessing particular degrees of substantial qualities.
- b. Possessing particular degrees of substantial abilities.
- c. Identified with socially significant groupings:
 1. Biologically derived
 2. Socially ascribed or achieved.

It is meaningful, for instance, to say that the proportions of people in a particular company or union society, who reveal certain characteristics are as follows: Physically handicapped, 10%; I.Q's. of 100 or better, 50%; emotionally unstable, 5%; possessing supervisory aptitudes and potential, 20%; under 40 years of age, 80%; male, 90%; members of "old families," 2%; Negro, 5%; Protestant, 75%; etc.

Not all of these are subject to objective verification, but many of them are. Proportions possessing other characteristics, such as the abilities of wisdom, perception, and faith are subject only to impressionistic appraisal. But every leader of a group and every participant is aware that, in the face of particular problems, adaptive action is conditioned by the number and proportion of people in the society characterized in these several ways. People are a resource, and their qualities, abilities, and identifications are distributed in such a way as to make that resource adequate or inadequate for particular group or individual purposes.

In the individual Structure of Living these People will include not only the members of the society whose Structure of Living is being described but all those with whom he has contact within and outside of this society, contacts not necessarily shared (though they may be) with other members of this particular group. In other words, the resource People for any individual includes people who are not members of the particular company or union society under consideration.

The description of People in either the group or the individual Structure of Living may seem to be an impossible task. If it is, then any comprehensive analysis of the determinants of human behavior is an impossible task. There is, however, one fact which may help to reduce the task to manageable proportions.

In describing the People in either the group or individual Structure of Living the essential characteristics which need description are determined by virtue of the fact that people have a behavioral relationship to the particular organizational devices or bonds in their society. These will be described in a moment.* The important qualities, abilities, and identifications are those required to function satisfactorily as manipulators of technology and services, as members of work teams; as superiors, associates, or subordinates in the status system; as communicators of information; as rewarders or penalizers; as symbols of the organization as a whole; as suppliers and organizers of ideas; as educators. The qualities associated with functioning in these capacities will become clearer when we have discussed these organizational bonds or devices.

Materials include all those material resources which are social products both consumers' (e.g. food, clothing, shelter) and producers' goods (e.g. plant, equipment, tools) as well as the media of exchange, (e.g. money and credit) in terms of which these are valued.

* See below, pp. 11

We distinguish materials in this layer of social resources from those in the layer of natural resources to be discussed in a moment. Coal in the ground is a natural resource; coal at the pit-head is a social resource. Rock containing ferrous metal is a natural resource; a gondola of iron ore, iron ingots, and steel are social resources. The distinguishing feature of materials as social resources is that men, by their efforts, have produced or transformed them; they are the products of social activity, in a word they are social products.

The individual's Structure of Living contains only those materials of the society under discussion which are possessed by or available to him; but it also contains materials available to him from sources other than that society. To use a simple example he has a home and tools that are not included in materials supplied by or used in connection with the company.

Ideas are the body of knowledge immediately available to, comprehended by, and customarily utilized by the members of a society. Ideas are those intellectual formulations by which members of the society represent perfectly or imperfectly their conception of their own nature, their world, the relationships among its parts, and their relationship to its parts or to the whole. Ideas represent not only objective elements normally labelled material, such as factory, tools, etc., but those normally labelled spiritual, as justice, hate, courage, thrift, etc.

It is meaningful to say, for instance, that the individual ideas available, comprehended and utilized by the members of Union X, or of Company Y, include, "A factory is a necessary but an unpleasant place to work," "A tool is an extension of a man's hand," "Man is a thinking animal," "All men are created equal, but some are more equal than others," "Competition is the law of life, but too much competition destroys life," "Education is the road to success," "Honesty is the best policy," "There is a God, who created and sustains men." It is also meaningful to say that the members of a Banking House society are aware of a formula for indicating the relationship of certain quantities to the price level, $P = \frac{MV + M'V'}{T}$. Ideas are also organized in configurations or systems such as philosophy, science, or theology, etc.

We should emphasize at this point that the stock of ideas includes those which represent man's conception of his appropriate relationship to other men and to the universe of which he is a part. That is, they include those ideas which are normally defined as ethical and religious. It includes also artistic and aesthetic ideas as well as those labelled economic and political, which have a more functional character.

It should be evident that ideas are the mental images held by people of themselves and of every objective element in their Structure of Living, as well as their conceptions of relations among these elements. Whatever other content may be given to the term ideas, this is the meaning important for our purposes. It is in this sense that ideas are a social resource in the form of

intellectual tools with which men perceive and interpret the objective characteristics of themselves and their world. In any response to these characteristics involving thought it is the ideas held which suggest the appropriate character of that response.

As in the case of materials any particular individual comprehends and has available to him only a portion of ideas generally available in the company or union society, and may have a personal stock of his own acquired or available through contact with other societies.

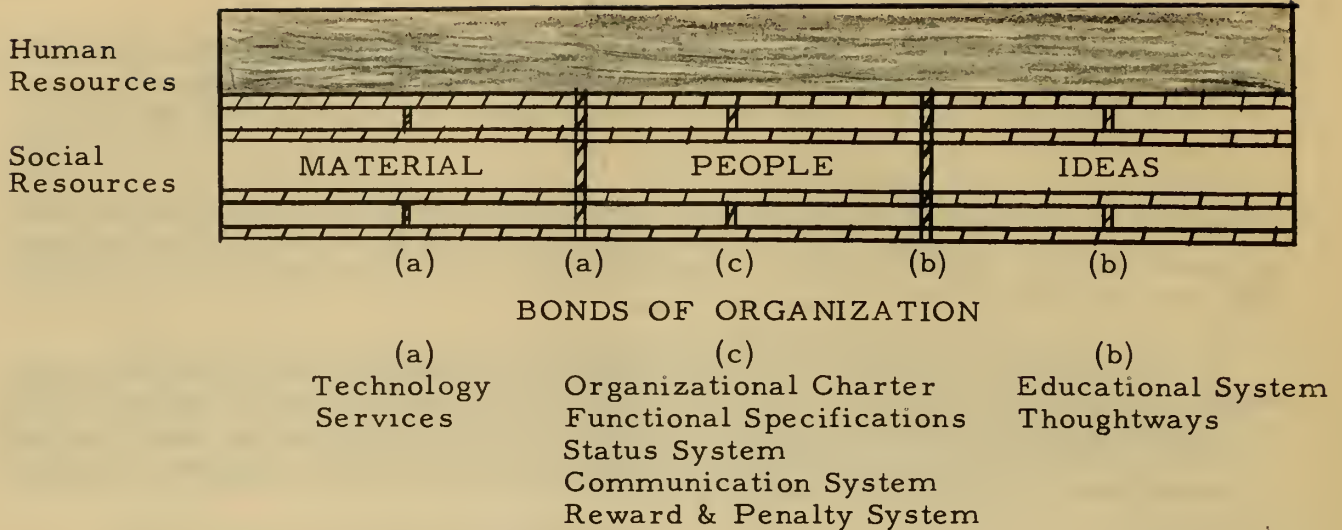
As we shall see, this variant availability of and contact with materials, people, and ideas among the several members of a society furnishes one of the most severe problems, a solution for which must be attempted by the Structure of Living of the group as a whole in order to obtain effective teamwork in the accomplishment of the group objective.-

Bonds of Organization

But any society has many people, materials, and ideas. These must all be bound together into a functioning whole. This leads us to a consideration of those social resources which accomplish this "tying together" task. We may label them "devices or bonds of organization." On the diagram below they are represented as social mortar which binds the multitude of people, materials, and ideas together. This social mortar (or devices or bonds of organization) is a significant part of the social resources which furnish a basis for social and individual behavior of all participants in the group or society. I have likened these bonds or devices of organization to mortar that holds the elements of the society together. They can also be compared with the several systems (digestive, nervous, respiratory, etc.) which make organizational sense out of the activities of the cells and organs of the body.* These are the elements in the Structure of Living, the substance of which is the behavior of people. Indeed they may be described as customary patterns of behavior.

We shall not in each case remind the reader of the differences between the group and individual Structure of Living in describing the nature of these bonds of organization. It should by now be obvious that they grow out of the fact that individuals act and think in relation to only a part of such devices utilized by the group as a whole, and that in turn their personal devices must provide for relationship with materials, people, and ideas beyond those comprehended within the Structure of Living of the particular company or union society.

* The analogies are just that. Because they are likened to mortar and are called devices or bonds does not mean that they have any independent existence apart from the behavior of and relations between people. Actually they are customary patterns of behavior. They have no more independent reality than the digestive system has reality apart from the operations of the mouth, the stomach, the intestines, etc.



Notice first the organizational devices or bonds which link people and materials together (a). The first of these we call Technology, the sum total of those mechanical devices and procedures which link people up with the materials on which and the tools with which they work. The same "mortar" relates materials to each other. Engineering Techniques are a part of this "mortar." These would, of course, include not only techniques of normal operations but those relevant to repairs, maintenance, safe operations, etc.

In addition to Technology, there are certain Services which facilitate the relation of people to materials, for example, banking, taxation, purchasing, requisitioning, marketing, insurance, or their counterparts in a smaller society. It is tolerably accurate to identify Technology with those social, economic devices related to production, and to identify Services with those related to distribution.

Notice second the organizational devices or bonds which link people and ideas together (b). We call the first the Educational System. It is the device through which people "acquire" and learn to produce ideas and ideals. A further type of mortar which binds people to ideas as well as ideas to each other we label, Thoughtways. These range from very informal "ways of thinking," of producing ideas, or tying them together, to the most elaborate and formalized method in the shape of science, scholarship, research, etc. It includes, also what is often referred to as the decision-making process.

A major concern of our observations, however, are the devices or bonds of organization (c), that bind the people of a group or society (say a company or a union) together in a functioning team.

We can list five such "bonds" or types of social mortar, and each of them requires careful definition, much more careful than we shall be able to give them at the moment. We shall discuss them more fully than the foregoing bonds because they are especially important in defining the nature of human relations in a

particular society. We do not by this statement, however, wish to minimize the significance of technology, services, education, and thoughtways. On the whole, however, the content of these latter bonds is better understood and agreed upon than is the content of those we are about to name.

The five bonds which weld the people of a society together into a functioning team are these:

1. Organizational Charter
2. System of Functional Specifications
3. Status System
4. Communication System
5. Reward and Penalty System

These are the bonds of organization which have served in our investigations to date as useful categories for classifying those patterns of behavior which perform the function of making a team out of a varied collection of individuals.*

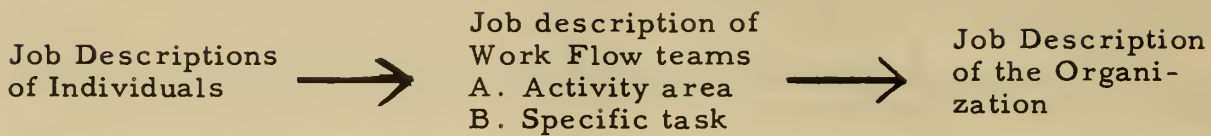
Let me define what I mean by each of these. The Organizational Charter is the set of recognized purposes or functions, policies, significance, and reputation which stand for and give meaning to the organization as a whole. It is the content of the picture of the organization which comes to one's mind when he says, "I am a citizen of the United States," "I am a Yale man," "I am a member of the United Steel Workers," "I am a Shell Oil Man," "I am a Johnson."

The Organizational Charter must also be defined by the determinants of its scope and limitations. In addition one more aspect is important, that is the cues in the form of material and human symbols, slogans, documents, tradition, and folklore which suggest it, (and also reenforce it).

The system of Functional Specifications provides for placing people along the flow of work and defines the functions of individuals and groups along that flow of work. It has at its base the job descriptions of every participant in the organization insofar as such descriptions define a function in the flow of activities which add up to the product or service the organization is set up to produce. At its apex it has the definition of the function of the organization as a whole (which is also a part of the Organizational Charter). It includes the functions of the several groupings of people by which the job functions of the individuals are tied to and coordinated with the function of the organization.

*A more complete definition of these five bonds amplified and given content by reference to an investigation of the structure of human relations in a particular company and union is contained in Bonds of Organization, by E. Wight Bakke. Harpers and Brothers, N. Y., 1950.

It may be illustrated by the following diagram.



When we describe the job description of individuals we shall be, in effect recapitulating the ways of behaving which are the substance of the other bonds. Each individual finds his functional role in an organization described by reference to two circumstances, the proportions of his activity devoted to implementing one or another of the Bonds of Organization, and the proportions of his activity devoted to activity and relationships with people of the particular society or outside of that society.

As an example of the first variant, his primary task may be related to Technology (a craftsman), or to Services (a salesman, comptroller, or tool room foreman) or to the Communication system (messenger boy), or to the Status system (general manager or supervisor) or to the Reward and Penalty system (paymaster or benefits administrator), or to the Organizational Charter (any person, usually of high rank, who is primarily a figurehead or a front symbolizing the organization as a whole, but who actually performs relatively few tasks), or to the Educational system (training director), or to Thoughtways (planners, research people, decision makers...) Any one person may, of course, be involved in behavior related to several of these bonds of organization.

As an example of the second variant, he may find that most of his functions bring him into contacts with people inside the organization, or almost entirely with people outside the organization, in, for instance, establishing contacts with other organizations, non-members, or customers, or government, etc.

The system of Functional Specifications says to every participant, every sub-group, and to the group as a whole, "This is your productive task, and this is the relation of that task to those performed by others in the organization."

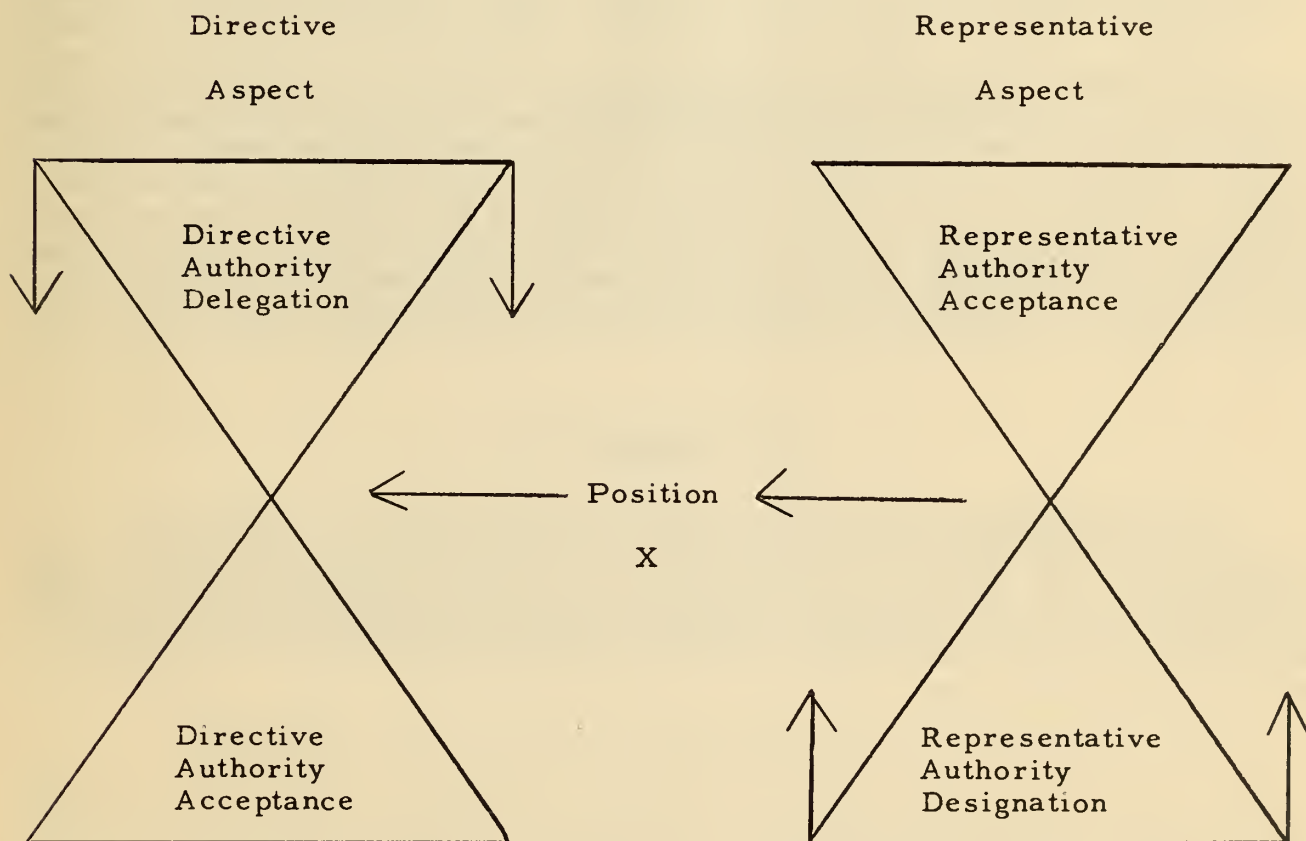
The Status system provides for the placing of individuals in a vertical hierarchy of authority and deference. It provides a system or organization of positions, which determines who shall direct whom and who shall represent whom. The first aspect looks down the status hierarchy, the second looks up the status hierarchy. It includes a definition of the source and scope of authority to direct or to represent, as the case may be. It also includes the methods of administration and the techniques for assignment to and maintenance in positions of directive and representative authority. Like the other bonds it includes the cues such as titles, symbols of rank, seals, letterheads, which suggest (and also reenforce) action relative to authority or deference.

The Status system says to every member in the organization, "This is your status, you are (say) a foreman. You will direct workers, a, b, c, and d

in accordance with the directions given you by manager X. He has delegated certain authority to you which he, in turn, has been delegated in more general form by Y. That delegation is one determinant of the scope and source of your authority. Another is whether workers, a, b, c, and d, accept and follow your direction. You will also represent workers, a, b, c, and d, before manager X or those higher up in line. The first determinant of the source and scope of your authority to represent is your 'designation' by them as their representative. Another determinant is the degree to which manager X and those 'above' him accept and act on your representation.

The Status system may be represented by the following diagram:

STATUS SYSTEM



The Communication system provides for the transmission of information. It is a helper system to the other systems. It can be described in terms of the subjects, objectives, route, techniques, timing, authentication, and controls of communications.

It is probably wise at this point to indicate the difference between the Communication system and the Educational system discussed above. Often the difference is a matter of emphasis. The transmission of work orders is a clear example of communication. A course in the principles of human relations can well be an example of education (though it may fall short of the mark).

In general, the marks of communication as we use the term, are that it involves the transmission of (a) operational information for (b) immediate and (c) limited use and is (d) specifically applicable to a problem of current concern.

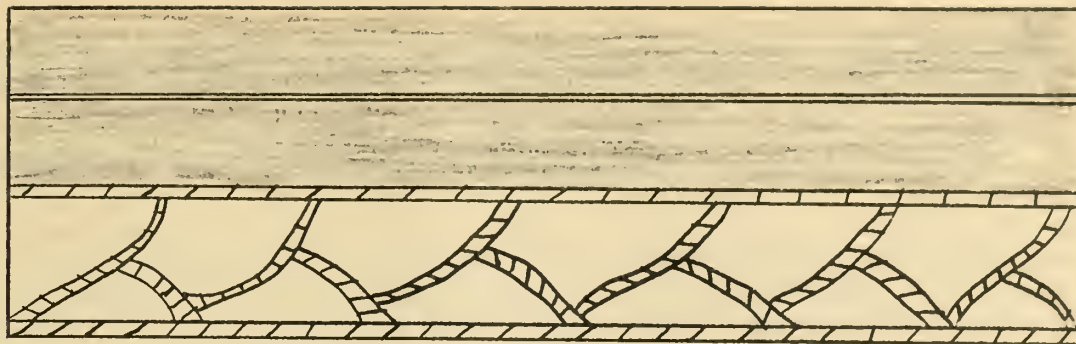
In general, the marks of education, as we use the term, are that it involves the transmission of ideas and skills (a) general character, for (b) long range and (c) general use, and it involves (d) training for the development of ideas and skills.

Even a college course could be largely communication in this sense and not education, and a training course could be either, depending on its emphasis.

The system of Rewards and Penalties provides for the encouragement of behavior deemed helpful to and consistent with the purposes and welfare of the society (or, in the individual Structure of Living, the circle of contacts) and the discouragement of that deemed harmful to and inconsistent with those purposes and welfare. It can be described in terms of the kinds of behavior (and inferred human qualities) rewarded and penalized, the objective, instruments, and agents of reward and penalty, and the basis of their power to reward and penalize. It also includes the cues which suggest appropriate action and response related to behavior of this type.

Natural Resources

The two foundation layers of human resources and social resources rest on another foundation layer which we may label the natural resources and environment. The meaning of this term is clear without further definition. It obviously includes the elements of weather, the available raw materials, the soil, the water, plant and animal life, and also the scenic resources of the natural environment, etc.

Human
ResourcesSocial
ResourcesNatural
Resources

In any society (say a company or a union) the behavior of people will, to a large measure be adjusted to these resources, since activity and thought must be carried on with reference to whatever opportunities and obstacles are offered by them. It is in this sense that the resources, as existing, "determine" the social behavior, or as some prefer to call it, the interactions, of the group.

Behavior which is consistent with and adjusted to the nature of the people, materials, and ideas, and with the existing bonds of organization, and with the natural environment, of course presents problems for individual participants. They may have drives or desires which push or pull them toward inconsistent and unadjusted behavior. Nevertheless they find advantages in conformity to the facts and bonds presented to them in their society. They are saved the trouble of initiation of an original solution for every problem they face. Since most people follow the social pattern, they know what to count on in the actions of other people. The rewards and penalties are set up, by and large, to perpetuate those patterns. They feel geared into and a significant part of the whole Structure of Living of the group when they follow these patterns. These considerations exert strong pressure on individuals to conform, and when they do conform, they strengthen by their behavior the existing bonds of organization. (We shall discuss the provision for invention and change when we consider "adaptive behavior".)

Goals

The influence of the human, social and natural resources in the Structure of Living on the behavior of men appears to be deterministic in character. The suggestions offered as to appropriate behavior by the bonds of organization, the necessity of utilizing particular, available elements in these resources require adjustments to such realities on the part of individual members of a society.

Knowledge of these resources might enable one to predict possibilities or even probabilities in behavior. Such prediction would fall short of accuracy, however, if one were not aware of another set of elements in the Structure of Living which exert an influence on behavior. We refer to the goals of the group and of its individual members. Behavior is what it is because it is designed to

achieve certain goals as well as because it must utilize certain resources. The realization of a given goal may involve modification of the resources as well as their utilization.

By goals we mean the standards of successful and satisfactory living set by members of the group for themselves and for the group as a whole. They are the ultimate experiences people as individuals very much want to have. When they have these experiences, they consider that their behavior is effective and efficient and that the resources in their Structure of Living are adequate. If not, they sense an urge to modify either their standards or their resources or both.

If the behavior of people is what it is because they have to take account of given resources and given bonds of organization, it is also what it is because it is directed toward the achievement of certain goals, that is the having of certain desired experiences. It is well to remember that the content of these desired experiences, for particular individuals, will have been determined by life within the framework of other societies as well as that of the society under consideration.

The normal behavior of people in a society may thus be pictured as being based on existing resources and pointed toward existing goals. At the Yale Labor and Management Center we are trying to learn what these goals of individuals are.* Whether our investigations have been focused on the behavior of unemployed men, workers who were being organized, relations between union leaders and management, union leaders and union members, or management and employees, we have tried to find out "what really made these people tick." What were their goals, the experiences they very much desired to have, and how did the environment in which they lived help them or hinder them in their progress toward these goals?

Without claiming that the list is complete, or that it has been adequately tested, it may prove of value to name these goals. As they stand, they are our honest attempts to summarize the responses men make to such questions as "How do you define the difference between a fellow who has got ahead and one who is a failure?" "What do you want your children to get out of life that you have failed to get?" "Is there anyone you would like to change places with? Why?" and similar questions. The answers to such questions indicated that people laid unusual stress upon having certain experiences. These experiences we label their goals. What are they?

Basically they were three, security, progress, and justice. But these generalized experiences were realized in certain other experiences. We can say, therefore, that people wanted to experience: security with respect to, progress toward, and justice in the midst of the following additional experiences.

*In the discussion of goals we shall reverse the usual order and consider those first which pertain to individual participants.

1. Respect of their fellows. This is the desire to experience the respect those whose judgment is significant for the individual. It is often expressed as the desire to play a socially respected role and be the kind of person that people they associate with consider important and respectable.
2. Creature sufficiency. This is the desire to experience physical health and enjoyment in physical functions. It is frequently revealed in the expression of a desire for the amount and quality of food, clothes, shelter, health, etc. and the means to provide them, enjoyed by the most favored of their customary associates.
3. Control over their own affairs. This is the desire to have their own decisions and actions effective in shaping the course of their own lives and to reduce the control exercised by others.
4. Understanding. This is the desire to have a clear picture of the facts and forces that are at work in their world, and of the relation between what happens and what caused it to happen - in other words, "to know the score."
5. Capacity performance. This is the desire to experience the use of the full range of one's abilities. It is not the desire to burn one's self out on a particular task. The question as it applies to industrial relations is whether a man's job gives him the opportunity to do the sort of things he thinks he is capable of doing, or whether it calls out only an insignificant portion of his capabilities.
6. Integration. This goal is the hardest to define, but its importance is evident. We use it in the sense of wholeness. A man wants to feel whole within himself that is he wants to feel that his actions and principles are consistent. (Call that aspect of integration, self-respect.) But he also wants to feel whole with the world of people and things about him. He wants to be geared in, to sense that he is a significant part of it all. That world to which he seeks a significant relationship may be large or small. In the case of the religious man it comprehends the universe itself. (Call that aspect of integration, relationship.)

The distinction between the generalized and the particularized experience goals is important. The experience of security is sought, for instance, not merely through the particular experience of secure and dependable creature comforts. It is equally important to the achievement of security that respect, control, understanding, capacity performance, and integration be experienced as secure and dependable. The same statement applies to the generalized experience goals of progress and justice.

Because every participant in an organization is an individual, the specific content of these goal experiences varies among them. Nevertheless, that

content has general characteristics for certain sub-groups within the organization different from those of other sub-groups, and for the group as a whole different from those of other groups. It is this similarity of the content of the desired experience, of what it means to have this experience, that enables one to say that the participants in a particular society, or sub-group within it, share certain experience goals. This is not surprising since, over time, the experience that can be had by members of the group (as long as they remain members of the group) must be conditioned, by the opportunities and obstacles and by the patterns of behavior characterizing life in the group. For the great majority in the society the definition of desired experience cannot depart too far from that of possible experience. As we shall see when we discuss "adaptive" behavior, however, one stimulus to such behavior (on which of course the chance of progress within the society depends) is that a man's reach exceeds his grasp.

It should now be clear why we have discussed first the goals which pertain to the individual's Structure of Living. To do so raises the question whether for the group as a whole, whether in the group Structure of Living, there are any comparable ultimate experiences which members desire for the collective whole, for the society itself.

We have already indicated that an organized group has a definite function, say to make and distribute shoes, or to represent its members in the writing of a collective agreement. Such definition of function is included as a part of the system of Functional Specifications. We have also seen that purposes such as making a profit, increasing the bargaining power of workers, etc., help to define the Organizational Charter of an organization. But can such things be called goals in the sense in which we are using the word? I think not. They are to the group goal what the subsidiary or implementary desires of the individual to work, to make money, are to the individual's ultimate goals of security, progress, etc. As such they are properly classified as social resources helping or hindering the group and its participants in their attempts to realize their standards of successful living.*

Whether or not the group as such can be said to have any "goals," as we are using the term, other than what might result from portraying the range concentration and consistency of the sum of individual participants' goals, will depend on the answer to one question. Do those participants who have a contribution to make to a realization of such group goals (and this means every participant) include in their conception of security, progress, and justice, these as ultimate experiences for the group as a whole? If the vitality of such enlarged conceptions is undergirded by an acceptance and an active devotion on the

*This is a modification of the position taken on page 18 of the last previous edition of Adaptive Human Behavior. The reason for the modification is that the previous generalization did not stand up when tested by the findings of our most recent field work investigations.

part of those who, through numbers or power or both, have the capacity to realize their conception, they can be said to define a set of goals for the society as such. If the meaning, for such participants, of "security" includes "survival of the group;" if the meaning of "progress" includes the "increasing growth of the organization and the group in capacity more effectively to perform their function;" if the meaning of "justice" includes the collective achievement of a satisfying life for members and all those who deal with the organization; " if the meaning of the other more specific personal goals reveals a similar inclusion of experience for the group as a whole; then the group may be said to have group goals which motivate its collective action.

The important points are that the ultimate goals of an organization, a society, reside in the aspirations of its people for their society, that such aspirations are an amplification, and application to the collective entity, of their standards of successful living for themselves. In other words, a society has goals when, in the setting and accepting of standards of successful living, its people are group oriented and integrated as well as individual minded.

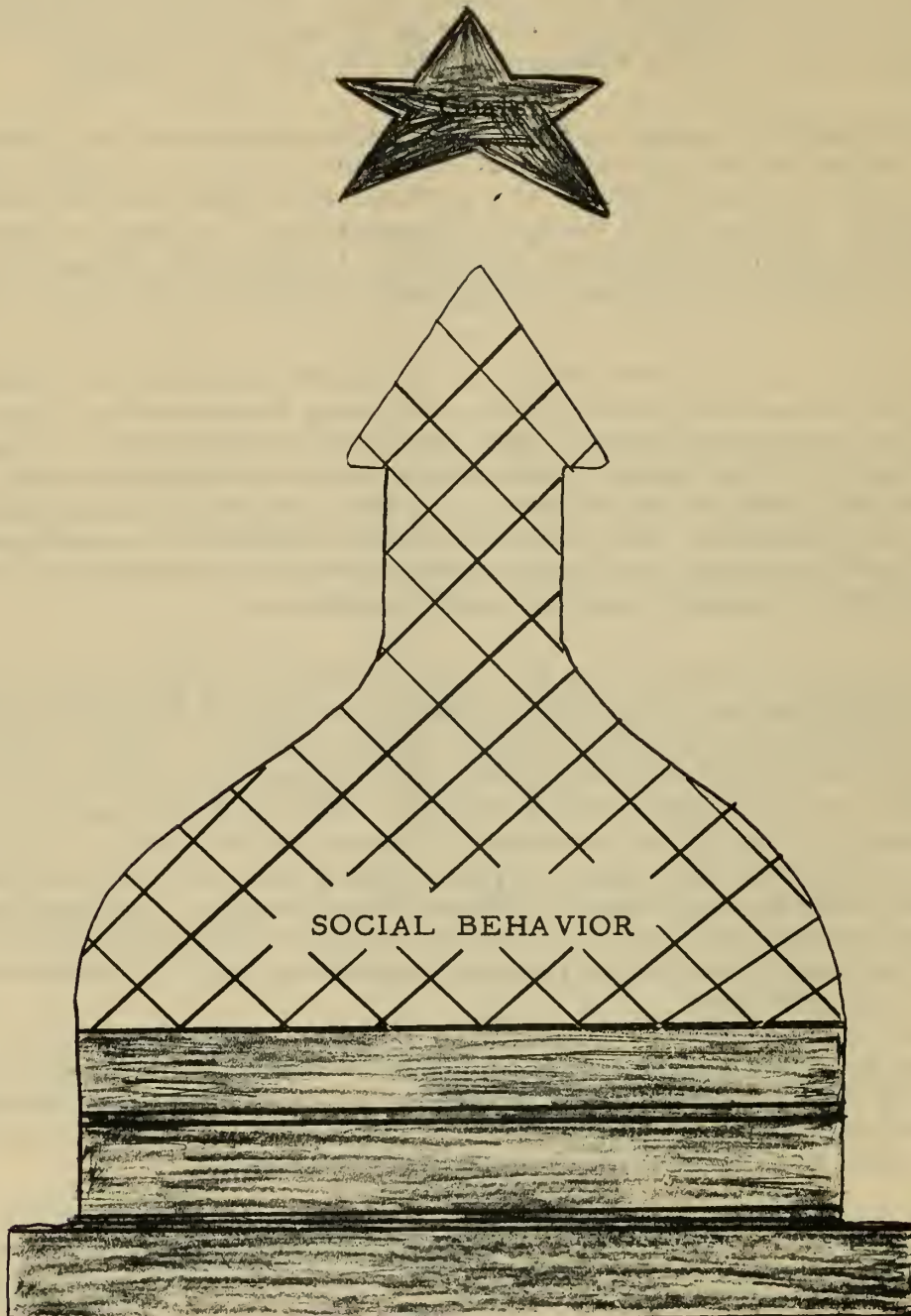
Any one familiar with the facts of organization life will realize that companies and unions and other "societies" vary considerably in the strength and vitality of such group goals. They will also be aware of the organizational difficulties which arise when a consensus in such conceptions is not complete or where actual conflicts or discrepancies have arisen among groups of participants on such matters. They will also know that there is a reciprocal strengthening of individual and group goals when the conception of each includes a genuine emphasis on the importance of the other.

It is well to point out at this juncture that both goals or standards and purposes are defined as to specific content in a particular society both by leadership and by participant consensus or acceptance. Their content, strength, and intensity, will vary, therefore, among societies stressing the same formally labelled goals and purposes. Whatever the label may be, the type and character are given meaning by leaders or members or both, whose place in the structure of the society places upon them the responsibility and authority to proclaim its general and specific objectives; and they are strong to the degree that all members of society accept them as legitimate, and identify the achievements of the groups' goals and specific purposes with the achievement of their own.

The bonds of organization described in a foregoing section may be considered "effective" if they are enabling the group as a whole to achieve its group goals. They may be considered "efficient" if they are enabling the members of the society to achieve their individual goals.

Social Behavior

We are now ready to represent the social behavior of the group or society as resting on a foundation of resources we have described and as directed toward the goals we have named.



By social behavior we mean the interactions among the people in a society whether of thought or activity, whether with respect to the members of their own society or to those outside, whether designed to solve internal or external problems. The customary social behavior is a summary of the customary ways in which the members of a society try to achieve their goals, making use of the human, social, and natural resources present in the Structure of Living of that society and in the face of the recurring problems arising from within and outside the Structure of Living.

Such customary social behavior is problem-solving in character and therefore adaptive. But it is obvious that certain problems raise greater demands for adaptation than others. Recurring or continuing problems which give rise to no unusual tensions, anxieties, or hopes are numerous; the ways of adaptation are so well known and constantly practiced that they are rarely thought of as adaptive. The operation of a machine, the giving of orders, the holding of a monthly conference may have become so much a part of recurring experience that they are looked upon as routine rather than adaptive. The processing of a grievance, a decision on new investment, a strike, on the other hand are considered as adaptive in a very real sense. Yet it should be clear that any distinction would arise from frequency, intensity, and difficulty, of the problem concerned rather than from any basic difference in the objective of the several examples of behavior. As long as the goals sought and the resources used are a part of the existing Structure of Living and the behavior follows well worn paths, it is customary social behavior. If, however, no customary way is available within the Structure of Living, the need for inventive adaptive behavior arises. We shall discuss both customary and inventive behavior more fully in a later chapter.

In a sense the body of customary social behavior is a recapitulation in dynamic terms of the behavior which is the substance of the bonds of organization. Once more, referring to a formerly used illustration, we may say that the customary social behavior of communicating is to the organizational bond, the communication system, as normal neural activity is to the nervous system.

Customary social behavior within a society can be described and used as a means of differentiating one society from another. It is a meaningful generalization, for instance, to say that members of Union A pay their dues to stewards, whereas in Union B they sign authorizations for a check-off. It is meaningful to say that employees in Company A work on individual tasks, whereas in Company B they work on group assignments. It makes sense to say that members of Union A elect their officers by secret ballot in annual elections, whereas in Union B they elect their officers by acclamation every two years, and in Union C they accept officers appointed by an International Executive Board.

What is the difference in the behavior item in the individual and in the group Structure of Living? Only a portion of the behavior of any individual is

carried on within the company or union society, but that portion, insofar as it brings him into relationship with other members of the society, is an ingredient of the social behavior of the group. It is activity which, when related to the activities of others, results in interactions. These in their sum comprise the social behavior of the group.

The behavior of individuals, as long as they are in contact with other members of the society under consideration, will tend to conform to the customary behavior, interactions, or the folkways of the group. But for reasons by now familiar to the reader, the conformity to the pattern will not be perfect in each case, and the sum of the individuals' behavior will include many activities carried on in association with other societies.

Reenforcements

We have one more element to add to our picture of the Structure of Living of a society. This element we call reenforcements. The members of every society sense a need to have social behavior as stable and effective as possible. Moreover, they want to feel that it is right and justified. They want to feel that it is significant and important. In other words, they want to be able to say, "The normal behavior of the people I associate with in this organization or society is dependable. You know what to count on. It gets the job done that as a group we are supposed to do. You don't have to worry about it being right either. You can't raise any questions on that score. And when you are engaged in activity and thought with this group, you know that individually and collectively you are doing things that count."

The fulfilling of these desires on the part of the members of a society is attempted by the use of reenforcements for the social behavior. Philosophy, formal or informal codes, faith, folklore, tradition, art, literature, documents, symbols, slogans, ritual are called on to bolster particular types of behavior. They appear to endow that behavior with the qualities of dependability, rightness, and significance.

Reenforcements help to make clearer what sort of behavior is expected, e.g., "The customer is always right," "Service with a smile," "Never give a sucker a break," traditions of what happened in the hurricane, constitutions, laws, statuary indicating great exertion, a placard on which is printed, "Think." Reenforcements provide simplified and symbolic representations of behavioral achievements, e.g., memorial plaques, caps, buttons, medals, ritual at installation or after twenty years service, pageants of company or union history. They provide sanctions for behavior, e.g., "The American Way," "Public Interest," "Greatest good for greatest number," "The Will of God," statements of precedent, codes and laws. Reenforcements connect certain types of behavior with cherished values, e.g., "This is necessary to maintain individual freedom and initiative," "An injury to one is the concern of all," "Civil liberties." I have used as examples above chiefly slogans, symbols, ritual and art, but reenforcements are as frequently constructed out of selected dogmas of philosophy and faith or of pertinent items in folklore and literature.

Many, if not all, reenforcements have already been defined as social resources. For instance, the philosophy of laizzez-faire used to bolster the practices of private enterprisers, or the philosophy of freedom used to bolster the practices of striking and picketting, or the philosophy of private property used to bolster unfettered managerial direction of industrial operations, or the philosophy of Democracy used to bolster the drive for participation in managerial decisions by workers, all these have already been classified as a part of the social resources of ideas and thoughtways. The same is true of folklore, traditions, literature, and art, and even material symbols. What distinguishes them in their present capacity as reenforcements is that they are used to perform a supporting function, and they have been selected from the stock of resources to support that behavior which has, on the whole, proved expedient. It should be noted, for instance, that the stock of ideas available to all or particular members of a society, may contain those that would not support the practice. For instance, the idea of public responsibility revealed in much philosophy, in traditions, folklore, and slogans may not support action which is reenforced by such slogans and philosophy as the "Right to Strike" or the "Right to manage in any way promising maximum profits."

Slogans such as "An honest day's work for a fair day's pay," "Freedom of contract," "No strike is ever lost," "Survival of the fittest," "The dignity of man," "The scientific approach," "Dictatorship of the proletariat," "Managerial Prerogatives," "The right to strike," "Union Rights," etc., are more easily recognized as being primarily reenforcements, but they also are a part of the social resources in ideas available to a society. Verbal symbols, such as "Freedom," "Democracy," "Cooperation," "Responsibility," "Loyalty," likewise serve in a dual capacity. Written documents such as constitutions, proclamations, tablets of stone, certificates, etc., may serve as instruments of the Educational, Communication, Status, Functional Specifications, and Rewards and Penalty systems, and at the same time be used as reenforcements. Material, such as an elaborate and beautiful office building may serve as a material resource, as a visualization of the Organizational Charter, and as a symbol of that, but is also a reenforcement for the whole activity of the group. Material symbols, such as plaques, medals, or presents, reenforcing approved behavior are also instruments in the Reward and Penalty system. Ritual, as in installation, may be primarily designed as a means of authentication in the Communication and Status systems, but it is also a reenforcement for desirable social behavior.

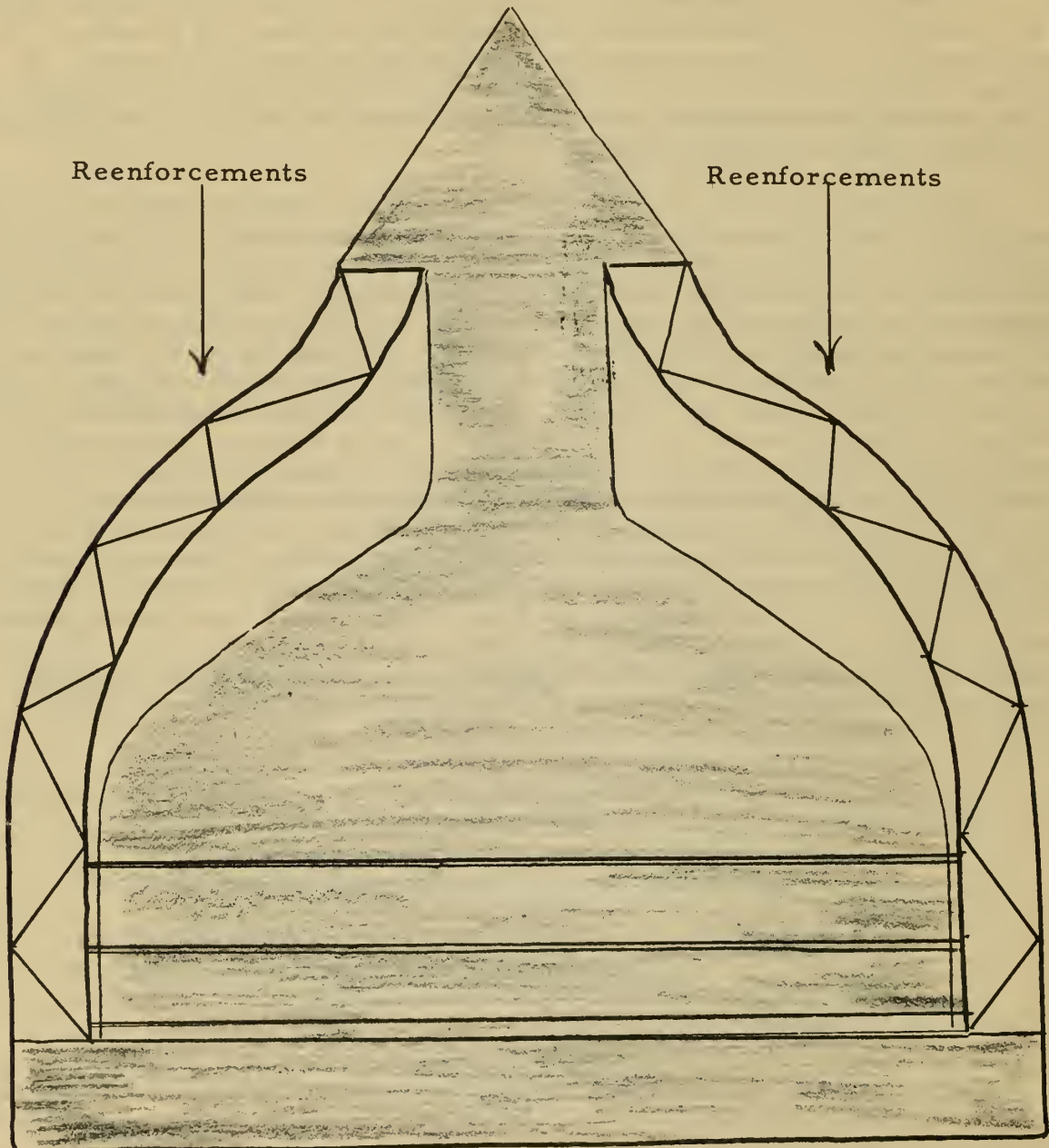
Here are examples of items in the Structure of Living which appear both as social resources and as reenforcements.

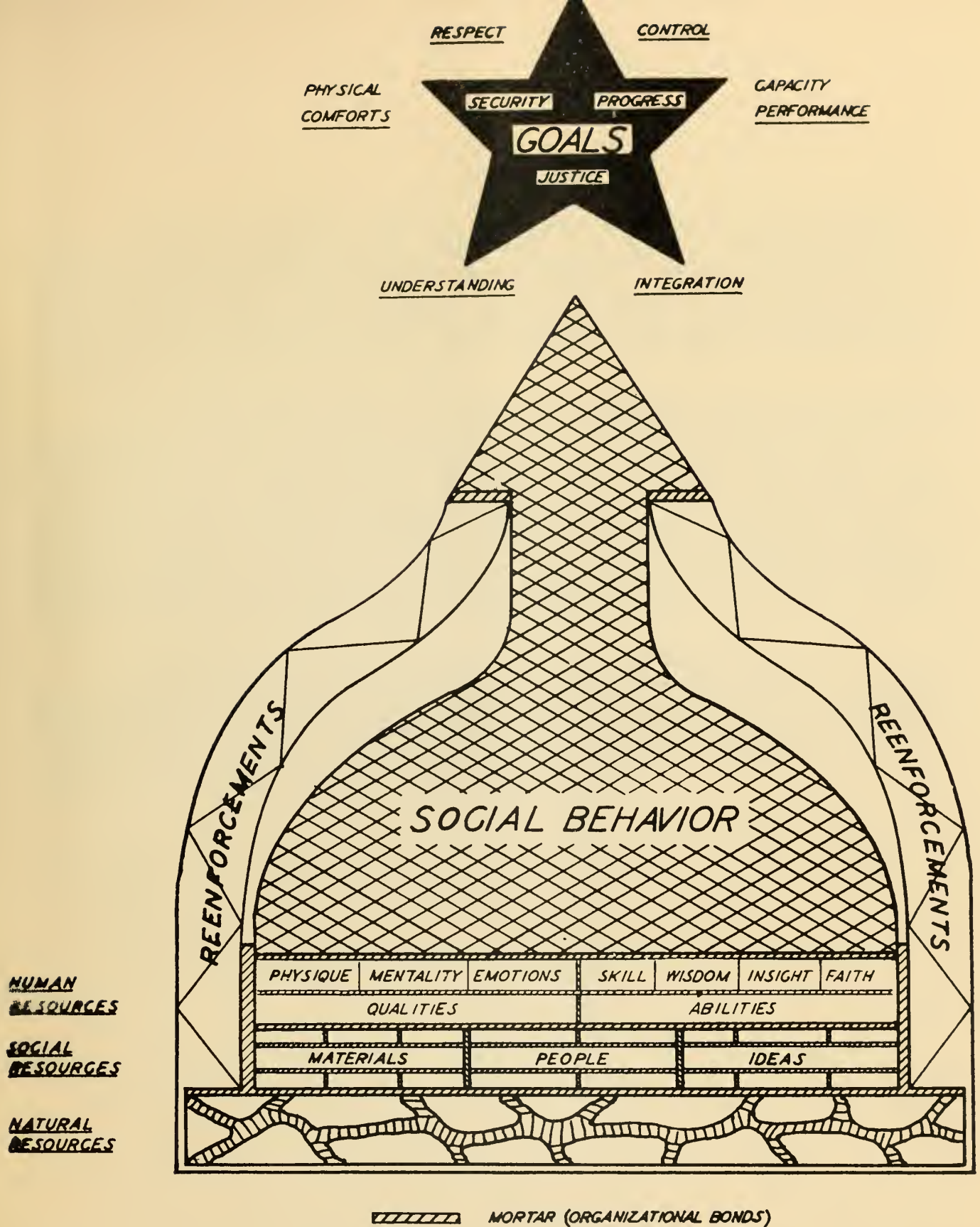
1. Selected dogmas of philosophy and faith.
2. Pertinent items of folklore, literature, art.
3. Slogans.
4. Verbal, written, human, and material symbols.
5. Ritual.
6. Codes and laws.

One significant difference in their character as social resources and as reenforcements is that in the first relationship they are more subject to modification than in the second relationship. Any shading or compromising or even

criticism of these social resources when used as reinforcements tends to destroy their usefulness in that latter capacity. That is one reason why modifications occur so slowly in the area of ideational resources which supply so many of these reinforcements. The possibility that the modification of ideas "as resources" will destroy their effectiveness "as reinforcements" is ever present. Even in the field of material things particular societies, including universities, have been known to retain buildings long past their usefulness as material resources because of their symbolic support for the life of the society.

We may represent these reinforcements on the diagram we have been constructing as flying buttresses which support the normal social behavior of the members of the society.





STRUCTURE OF LIVING

Summary

When we say that in studying a company or union we are studying a society, a social organism, this is what we mean. It is an organized group of individuals living and working together within this "Structure of Living" as defined by the goals of the society and the shared goals of its members, the human, social, and natural resources available, the customary social behavior shaped by both influences, and the reinforcements available to stabilize and justify that behavior within the group.

We cannot understand the behavior and thought we observe by assuming the people to be self contained biological and psychological units. Not only has the nature of the society of which they are members and its Structure of Living given them suggestions for and conditions of behavior and thought, not only has the relative position and role they play with respect to the whole group an important bearing on what they do and think, but the very structure of the society is so intertwined in the character of their own personalities that the two are inseparable. Moreover, the group as a whole has collective functions to perform to which the great majority of individual acts must be relevant and into which they must, of necessity, be integrated.

If this conception is essential for students of human behavior, it is equally essential for managers, leaders, as well as all participants in organized groups who wish to order their relationships and behavior consistently with the full range of forces and factors involved. "The proper study of mankind is man" - as a creature integrated physically, mentally, spiritually, and socially with the Structure of Living of his own group.

III

INTERPRETING HUMAN BEHAVIOR

The primary purpose of this book is to provide a description of the Structure of Living within which people live, to indicate how the goals, resources, and reinforcements incorporated within it determine their customary social behavior, and to interpret adaptive behavior as action or thought utilizing the elements in this Structure of Living in the solution of problems or seeking to modify those elements in the hope of a better solution.

From one point of view, then, it would appear unnecessary to discuss the ultimate problems to the solution of which such adaptive behavior is directed, since, whatever their incidence or character, they give rise to the proximate problems of utilizing or modifying the existing Structure of Living.

Nevertheless, a brief discussion of the nature and locus of problems faced by members of a group will help to clarify the immediate importance of understanding the available Structure of Living as a problem-solving device and a determinant of the problem-solving behavior.

The Nature and Locus of Problems

It should be clear from our previous discussion that the problem may be one for the group as a whole, or for sub-groups within the society, or for individuals. In each case its solution involves the utilization or modification of the Structure of Living of the unit experiencing the problem.

It should also be clear that the problem may be old or new. It may arise as a situation long present as, for instance, a declining market or membership (for the group as a whole), or fluctuations in employment or inadequate bargaining power (for the individual). Or it may arise as a new situation such as a strike or lockout or difficulties in integrating new members (for the group as a whole), or a change in work process, a new foreman or union leader (for the individual). Old or new, the immediate problem faced by the group or individual is the utilization or modification of their respective existing Structures of Living to deal with the situation presented.

The problem can be identified not only as one which refers to a group or to an individual, and as one which is new or old, it can be identified as one which originates within or outside of the existing Structure of Living. A few examples will illustrate this fact.

When the human resources, say of intelligence and skill, embodied in the people who are members of a society are inadequate, this is clearly a problem arising within the Structure of Living. But when we observe a group or individuals in action, we find that they are concerned not only about the people who are actually related within the group, but about the people who are potentially members of the group. A firm has, for instance, not only an actual labor

force, but a potential labor supply, a union has not only an actual membership, but a potential group of recruits, an individual has not only actual friends but potential ones as well. Any organization for which expansion was necessary or desirable would be acutely aware of the fact that the human resources embodied in people both inside and outside the organization furnished it with problems. An individual desiring to extend his circle of friends would be aware of the same fact.

Moreover representatives of any group, as such, have relations with people outside the group's membership, let us say with the representatives of other organizations such as a public utility commission, government bureaus, legislatures, a patent firm, a competing company or union. The characteristics of people involved in these organizations, these out-groupers, furnish problems as well as do the characteristics of the in-groupers.

Not only the characteristics of, but the behavior of, these out-groupers furnish problems. Executives charged with the development of a reward system, or a part of it, such as a wage structure, are fully conscious that the reaction of potential members and of representatives of the organizations named above, must be considered along with those of the present members of the society. Those concerned with the organization of a Status system within a union which may, let us say, involve relative opportunities for Negro and white members, would neglect at their peril the problems raised by the reactions to it of those outside their membership.

Materials and Ideas outside the existing Structure of Living of the group or of individuals, provide problems also. This is particularly true of competing materials or ideas. Natural gas for a coal company, plastics for a steel company are examples of external problem-producing materials. A substantial body of "outside" ideas relative to property rights, human nature, political functions, ethics, etc. not an accepted part of the ideational elements of a particular union or company Structure of Living presents them, nevertheless, with serious problems of internal adaptation.

It is obvious, of course, that events or situations having their incidence outside any society may face the members of that society and the Structure of Living within which they live with severe problems.

The point we would like to make here, however, is that, whatever the incidence of the problem, the resulting behavior cannot be explained merely by defining the objective facts with which that behavior must deal. The explanation must also include a definition of the nature and adaptability of the Structure of Living within which that behavior takes place. That Structure of Living may be likened to a tool with which the mechanic works on his material. The character of both material and tool must be used in explaining his behavior.

Let us consider several cases with the help of this analogy. A manager of a plant to whom a large contract has been awarded finds that his working force needs to be expanded and that several engineers possessing skills different from those of his present staff need to be hired. He adapts himself to the problem by hiring the needed personnel.. We could phrase his problem and the

stimulus to his adaptive behavior in ultimate terms as a contract calling for certain productive capacities, or in proximate terms as an inadequacy of his resource, "people" for operations which would enable him to realize his immediate goal of profitable fulfilling of the contract. He must adapt himself to the proximate problem before going to work on the ultimate one.

A union leader who is faced with a rebellious faction in his union finds that his means of communication with the membership, and his authority in directing and representing them needs to be strengthened if the factionalism is to be overcome. He proceeds to do so, thus adapting himself to the situation. We could phrase his problem and the stimulus to his adaptive behavior in ultimate terms as factionalism which it is desirable to reduce, or in proximate terms as an inadequacy in the Communication and Status systems of the union for action which would enable him to deal with the factionalism and to realize the union's goal of group solidarity.

A hosiery manufacturer in Philadelphia finds that the competition of firms in St. Louis is eating into his market, and that the technology and cost structure of his firm do not enable him to meet this competition. He adapts himself to the situation by installing new machines and suggesting a cut in the piece rates. We may phrase his problem and the stimulus to his adaptive behavior in ultimate terms as competition in the product market necessitating lower costs. Or we could phrase it in proximate terms as the inadequacy of the existing Technology and Reward and Penalty system to realize the firm's immediate goal of recovery of its share of the market and the major goal of profitable operations.

The union leader in this same place is faced with the necessity of saving the jobs of most of the men by getting membership consent to changes in technology which would displace some of them, and to a cut in piece rates. In order to do this he finds that his persuasive and compulsive powers need to be strengthened by asking for and getting a closed shop. We may phrase his organizational problem, and the stimulus to his adaptive behavior, in ultimate terms as a threat to the job security and wages of members, and the necessity to get membership support for distasteful changes, or in proximate terms as the inadequacy of the union's Reward and Penalty system to realize his immediate goal of servicing his members and his major goal of maintaining group solidarity.

The implications of these illustrations are obvious. The first is that the problem may arise from a condition within or outside of the Structure of Living of the group. The second is that, whatever its origin, it is internalized as a problem of adequacy or inadequacy in the Structure of Living and of utilizing or modifying it to meet the problem.

Both practical men and academic research people are "problem minded." Our emphasis on the Structure of Living as a tool in problem-solving does not minimize our interest in, or any analysis made of, problems such as the pattern of competition, compulsive legislation, price movements, investment opportunities, taxation, competing unions, etc., which arise outside of the group, or factionalism, low production, lack of responsibility or loyalty, etc., which arise

within the Structure of Living. We are suggesting, however, that the definition of the problem is incomplete until it has included a portrayal of the capacity of the Structure of Living to provide goals and resources and suggestions and reinforcements for behavior which are utilized in problem-solving, whether the problem is internal or external in character. We are suggesting that effective interpretation of adaptive behavior depends on an understanding of the character of the problem-solving tool as well as the problem itself. Moreover, we are suggesting that the proximate problem which men are trying to solve through the behavior which we observe is always the utilization or modification of their Structure of Living. They attack their ultimate problem of competition, unemployment, legal status and restrictions, jurisdictional controversies, price movements, investment opportunities, financial support, warlike threats, competing ideas or economic systems, etc., by utilizing or modifying the elements in their Structure of Living.

Their adaptive behavior cannot, therefore, be "explained" by reference to quantitative or qualitative analysis of the aspects of their problem in such "ultimate" terms alone. The contribution of such analysis is to provide a statement of the objective facts to which the Structure of Living must provide adequate resources and suggestions for response, or to which it must accommodate or adapt itself, so that it does. Observed behavior is not "explained" as a direct effect of such ultimate "causes" but as action or thought bringing existing resources within the Structure of Living to bear on such facts, or as action or thought seeking to modify the Structure of Living, so as to enable it to deal with such facts effectively. The adequacy or inadequacy of the Structure of Living is thus an integral element in the "problem."

When, in a moment, therefore, we suggest that adaptive behavior is a response to a potential or actual disequilibrium in the Structure of Living, we are not ignoring the problems which bring this disequilibrium to light, we are merely associating this adaptive behavior with the utilization or modification of the tool with which people go to work on their problems. We are emphasizing a link in "causation" which is frequently missing in the analysis of "determinants" of behavior made by practical and academic thinkers.

Perception and Interpretation of the Problem

Another reason that this "tool," the Structure of Living, cannot be ignored is that contact with its elements has conditioned members of the group to perceive and interpret the "ultimate" problem in certain ways. And men react to their perception and interpretation of the problem, rather than to any "objective" delineation of it. This fact was brought home vividly to me in the first two research projects I undertook. I was studying the responses made by British and American workers to the fact of unemployment. The following commentary on their reactions indicates a relative emphasis rather than an exhaustive characterization of their respective behavior patterns. The British workers, I found, conceived of unemployment as a problem of industrial and political maladjustment. The employment status of an individual was a resultant of the operation of factors in the "system" beyond his control, and about

which, as an individual, he could do little or nothing. This definition of the problem had been given to him by the ideational elements in his Structure of Living, and by the Socialist elements in the educational system of the unions and the Labor Party which he experienced. Interpreting his problem in this way, he was naturally amenable to the suggestion that the appropriate response was a strengthening of the political devices by which such impersonal factors could be controlled.

The American workers, among whom I did my second research project, however, interpreted unemployment in the light of the "American dream," that any "good" man could get a job, and that failure to do so was an evidence of "personal" inadequacy rather than of an inadequacy of the "system." The Educational system which they experienced as citizens had emphasized this idea. Even the Educational system embodied in the activities of their A.F.L. trade unions had emphasized such a premise. Interpreting his problem in this way, the American worker was much more interested in correcting his "personal" inadequacy and increasing his "personal" opportunities, than in changing the "system."

The measures which the American unemployed initiated among themselves were of the "self help" variety. The other measures which they supported (e.g. New Deal Legislation) were primarily those which strengthened their individual bargaining power. That many other citizens, including their employers, interpreted minimum wages, W.P.A., the right to choice of collective bargaining representatives, and social insurance benefits proportional to a man's earnings and employment record as a step toward Socialism is merely a verification of the point we are making. Such measures were not so interpreted by the workers. They were, in their minds, merely devices which increased the resources in their Structure of Living so that, as individuals, they could better meet the problems of living which they, as individuals, faced. They responded to these innovations not, therefore, as steps toward Socialism, but as means by which the "American dream" of individual achievement could be realized, and the frustration arising from guilt because of individual incompetency could be minimized.

This difference in interpretation of the problem rooted in the different Structures of Living which they experienced, had another effect. It produced a different reaction to their employers who, in both countries, opposed the corrective measures taken.

The opposition of British employers to political measures sponsored by the Labor Party was understood by British workers in the light of the workers' interpretation of the problem. They, the employers, were, after all merely the tools of a basically "exploiting of labor" economic system. Opposition to corrective legislation was an outgrowth of their position in that system. The opposition of American employers to "New Deal" legislation was interpreted quite differently by American workers. These employers, as pictured by American workers, were not tools of a system; they were individuals who had committed themselves, at least in proclamation, to the American dream of individual achievement. When they withheld their support from, or opposed measures believed brought closer to realization of this dream, they, in the workers'

minds, were acting as individuals in violation of their individually stated convictions. They were, therefore, guilty of insincerity and dishonesty.

Appeals to action from American labor leaders based on this sort of judgment about employers have been notably successful in recent years. Even plants with a long record of excellent employer-employee relations, have been organized with the union as a protective hedge against what "this kind of an employer" might do. The explanation is not to be found alone in what employers have done. It is to be found also in the interpretation of what they have done and might do, as made by American workers conditioned by the American dream of individual achievement through self-determination, and the American code of personal responsibility and integrity.

For these reasons, then, a problem stimulating adaptive behavior is incompletely defined until it has included an account of the character of the Structure of Living, and its adaptability to the task at hand, as well as a description of that task itself.

One other comment needs to be made about the nature of a problem. It may be in fact, or looked upon as, either an opportunity or a difficulty. This comment is essential because of the tendency for the word "problem" to be thought of as something negating satisfaction. But so-called problems may suggest promises as well as threats. The Structure of Living is used or modified either for the exploiting of an opportunity or the overcoming of a difficulty. Its potential or actual disequilibrium may be revealed by either type of problem.

Explaining the Response to Problems

Since the group Structure of Living for any "society" or group of people contains the major stimuli to and resources utilized in behavior, since it suggests what that behavior should be and reenforces that which is expected of members of the society, it contains many clues useful in explaining observed behavior. Not all group-wide or group-wise, and certainly not all individual behavior, however, yields to interpretation in terms of those clues. This is true for at least two reasons. In the first place, the Structure of Living of individuals or groups of individuals within the society may vary in some respects from that of the group as a whole. In the second place, the Structure of Living may not, in the face of a particular problem, contain elements adequate to its solution. Nevertheless, since the existing Structure of Living of the group has been built up over time in response to recurring problems, we would expect that a thorough understanding of its elements would enable us to predict the probable character of a large share of observed behavior, the prediction being based on the assumption that behavior would conform to the patterns suggested and reenforced, and be consistent with the attainment of given goals with given resources.

Conforming Behavior

As long as the customary social behavior revealed in the interactions of members of the group is enabling the group, as such, and the members to move

toward their goals while solving their problems, there is a tendency for members to behave in ways suggested by and consistent with the Bonds of Organization. There are many advantages to this conformity from the point of view of the members, as we have seen. The following of tried and tested ways conserves time and thought. Consensus in thought and action increases the security and dependability of relationships and provides a guide to prediction of the behavior of others and a clue to the appropriate response for one's self. In addition to security, other goals, for instance respect and integration, are, for most people, realized more easily by conformity to, than by departure from, accepted ways. The reinforcements are developed largely to support conforming behavior. The strain toward consistency among the several patterns has normally produced a harmonious set of behavior patterns through the following of which one senses a personal internal harmony.

But these observations are pertinent only to the degree that behavior conforming to the Bonds of Organization and making use of these and other resources is actually bringing men or the group closer to their goals.

We should remind ourselves, again, that the attainment of such a result through conforming behavior does not imply the lack of problems. In a very real sense all behavior is problem-solving in purpose and character. The customary social behavior of a group or individual has become what it is because it is a response to problems involved in reaching customary goals through the use of customary resources available. Accommodation or adaptation through problem-solving adaptive behavior is a continuing experience of the members of a society. The problems vary in type and degree, but as long as the resources in the Structure of Living, are adequate and consistent with each other, as long as social behavior is fully utilizing the resources available, and as long as no rigidities within the Structure of Living stymie the accommodating and adaptive action, that Structure of Living may be inferred to be in a working equilibrium.

We should now consider, however, the situations in which a tendency is present toward non-conforming behavior. The first of these arises when the Structure of Living of an individual or group of individuals within the society varies from that we have observed to be generally characteristic of the group.

Individual Structures of Living

As we have seen, there is a sense in which each individual within the society has his own Structure of Living which, although similar to the Structure of Living of the group and to the individual Structures of others of the group, may vary from them in important respects. We may recapitulate several consequences of this fact.

We have said that an individual feels a compulsion to act and think in ways which are consistent with the Structures of Living of the group. But to the extent that his own Structure of Living varies from that of the group he may sense a counter compulsion. This individual Structure of Living is a personalized one, that is it includes only those elements which are experienced by him. For a particular individual the layer of human resources is his own personal

equipment. He may, for instance, be a strong man in the midst of weaklings, or be emotionally high strung in a group of phlegmatic people. Materials, People, Ideas in his personal Structure of Living are those available to and comprehend-ed by him, not the group as a whole. His goals are filled with specific content from his own experience, which, though it may be similar to that of his associates, necessarily contains peculiar and unique elements. Since an individual's behavior is suggested and reenforced by his own Structure of Living which, though basically the same as that for others in the group and for the group as a whole, may not be identical, deviant behavior of individuals is to be expected.

Membership in Related and General Groups

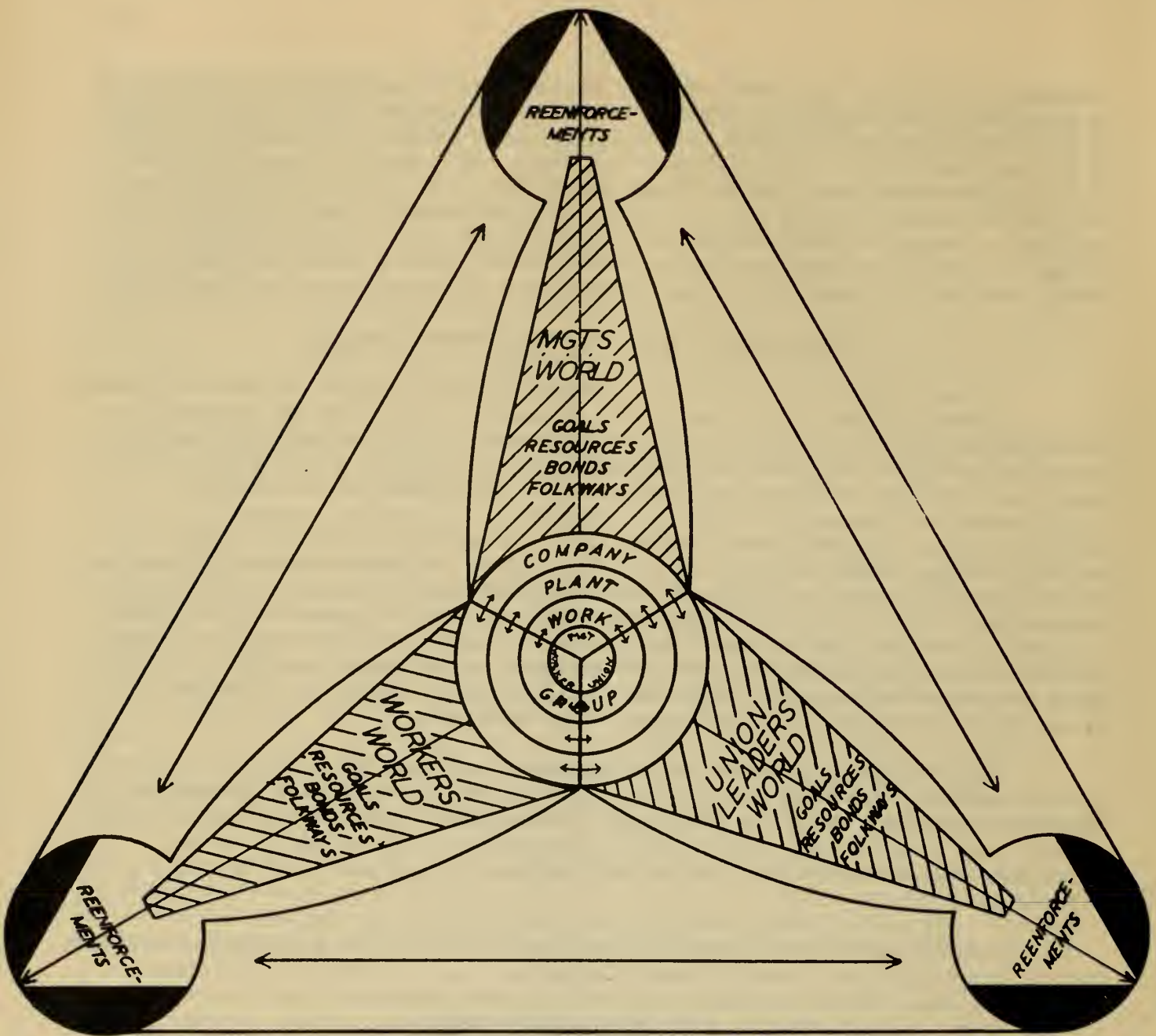
A fact helping to explain this variation in individual Structures of Living and a probable dissimilarity between the elements in these and the Structure of Living of the particular group being investigated, is that the individual participants are members of related and general groups as well. Some of these are organized and may therefore be labelled in our terminology as "societies." Participants in a company or union society are, for instance, members of international unions, manufacturers associations, or a larger corporation which are directly related to the societies in question. They are also members of general groups such as families, churches, communities, and a nation. Each of these has its general Structure of Living suggesting appropriate behavior, providing resources, and helping to define the content of goals of the participants. Since all members of the particular company or union do not come from identical related or general organized groups, the compulsions on behavior produced by association with them varies as among these members.

Some of the groups are not organized at all, but the determinants of behavior for those identified with such groups can still be described within the framework labelled Structure of Living. Although we cannot define these groups as societies in our sense, they do have a Structure of Living which exerts pressures sometimes formal, but usually informal, on those loosely associated with them.

Management participants are members of the related management group, that is, managers as a social group. Employees are members of a related workers' group. Union members and officers are members of a related union group. They, as individuals, are seeking the experiences of say, respect, control, integrity, progress, and security, etc. within those related groups, each of which imposes compulsions upon their behavior if they are to realize these experiences. Association and activity in these groups have helped to define the specific content of their individual goals, have molded their personal equipment, have supplied them with particular social resources, and have provided them with reinforcements for their behavior.

This fact reemphasizes the point made about individual Structures of Living in the foregoing paragraphs, and adds to variations in personal qualities and character, and to association with other organized groups, another reason for deviant activity tendencies among individuals and sub-groups in a particular society. This situation of multiple Structures of Living is represented by the following diagram.

STRUCTURE OF LIVING



IN
IMMEDIATE, RELATED, & GENERAL
ENVIRONMENTS

Within the boundaries of the circles, the department and the plant workers, union leaders, and management have relations with each other in doing jobs. What they do is in part a response to the facts they face there. Their behavior tends to conform to that indicated by the Structure of Living of the relevant group in which they are participants. But their action is also determined by the Structure of Living they share inside and outside the plant with members of related and general groups.

The Structure of Living can be studied then by reference to the immediate, related, and general groups, organized and unorganized. By the immediate groups we mean the particular society under investigation, say the department or plant. By the related groups we mean the particular groups with whom the individuals are most closely identified, organized, such as trade associations and international unions; unorganized, such as the world of management within and beyond the firm, the world of unionism and the labor movement, the world of labor. By general groups, we mean families, churches, communities and the nation, etc.

It will be necessary to remember in the discussion of goals, human and social resources, social behavior, and reinforcements, that these are first of all characteristics of the American scene. They may be more generalized, but we have ourselves gathered little evidence which would substantiate such a conclusion. It is even more important to remember, however, that these elements are defined primarily by the facts of life as experienced within a much smaller world than American society. The Structure of Living is defined differently for workers, union leaders, and management. It is defined differently for participants in Company A or Union X, than for those in Company B or Union Y. The compulsions on behavior, presented by the facts of these smaller worlds which differ in many respects, are probably a more potent influence on daily behavior than the compulsions arising from the common elements in American society which all share. This statement, however, applies to the content of the elements in the Structure of Living rather than to their type.

If the contact with multiple group Structures of Living exerting their compulsions upon the individual appears to complicate the task of interpretation and analysis of behavior within a given company or union, it should be remembered that the task is no more complicated than the reality to which it is directed.

These circumstances do not confuse the picture of the company or union society and its Structure of Living as much as one might suppose, however. The resources and patterns of normal behavior in a company or union are established in part to enable a varied group of individuals with varying personal Structures of Living to work and live together. Organizational devices or bonds of a particular society assume that a great variety of people are being welded together into a functioning team. If people were all identical, these devices or bonds would be quite different. They are described as patterns of interaction among people, a major characteristic of whom is that they differ from each other, and the devices or bonds take their character in large part from the necessities imposed upon them by this fact. A part of the function of the Status and of the Reward and Penalty systems of the company or union society as a whole, for

instance, is to reconcile different behavior tendencies. Those tendencies frequently arise from compulsions exerted by attempts to "be at home" in related and general groups outside the particular organization.

This is one reason why the Structure of Living of the group as a whole is not the sum of individual Structures of Living of its individual participants. The whole is not identical with the sum of its parts, if for no other reason than that a function of the whole is to organize parts which differ from each other, and to reconcile differences in such a way that the function of the whole may be carried on effectively. The very definition of a society is a group of varied individuals functioning within a common Structure of Living to accomplish a group purpose including the provision of satisfactions for the participants.

In any case, if the individual is to remain a member of the organization, he must modify his behavior so that it does not depart too far from the norm for the group. Unless the membership is in constant flux, therefore, the customary social behavior of the group tends to take on a pattern and order which makes it possible to give a meaningful description to the Structure of Living of the group as such.

Disequilibrium in Structure of Living

The first clue to the explanation of the behavior of the members of a society is the thought or action suggested and reenforced by the group Structure of Living. The second clue is the thought or action suggested and reenforced by the Structures of Living of individual members or groups of individuals. Still a third clue is to be found in the fact that action or thought not so suggested and reenforced is sometimes called for to correct potential or an actual disequilibrium in the Structure of Living.

When, within itself, the Structure of Living does not have the capacity for adaptation, or when, in the face of a new or old problem, its resources are inadequate, and, as a result, difficulties go unsolved or become more intense, and opportunities go unexploited, we may infer that the Structure of Living is in disequilibrium.

That is to say, a disequilibrium is that condition of the Structure of Living in which the customary social behavior suggested by the bonds of organization, utilizing the available human, social, and natural resources, and supported by the existing reenforcements, is not adequate to enable the group or individuals to make satisfactory progress toward their goals in the face of the problems they experienced. In other words, the Structure of Living, as presently constituted, does not contain within itself the facility for successful adaptation to the problems faced by those who must act and think within its framework.

It will be noted that this conception of disequilibrium bears a closer resemblance to that used in biology than to that used in physics.

We may distinguish, however, between a potential and an actual

disequilibrium. Any problem arising within or outside of the Structure of Living, whether old or new, is a challenge, not only to the people who experience it, but to the Structure of Living which suggests the behavioral adaptation to that problem. If the problem can be solved by behavior suggested and supported by the Structure of Living as it is, and is actually solved, the disequilibrium is only a potential one. If it cannot be solved, or is not solved, through "conforming" behavior, the potential disequilibrium becomes actual.

The latter situation calls for "inventive" or experimental adaptive behavior which we shall discuss in a moment. It may call, for instance, for the addition or creation of new resources, human, social, or natural; it may call for the modification of the bonds of organization; it may call for the redefinition of goals. In other words, it calls for action modifying the Structure of Living, not merely for action utilizing it. Conforming behavior is not the answer.

Conditions Indicating Disequilibrium

Since problem-solving behavior of the customary or conforming type involving a utilization of the Structure of Living, and since that of the experimental or inventive type involves a modification of the Structure of Living which is in actual disequilibrium, any explanation of the latter type must be grounded on an understanding of what conditions of the Structure of Living are productive of a disequilibrium. Our observations lead us to classify those conditions as inadequacies, inconsistencies, and rigidities. Examples of each of these conditions follow:

Any one acquainted with the realities of a company or union society can multiply the following examples of inadequacies potentially productive of a disequilibrium. Such phrases as (a) "the foreman's authority has broken down," (b) "the communications are interrupted," (c) "the division of labor is chaotic," (d) "the men don't get enough to live on and keep their kids in school," (e) "we don't have enough sheet steel," (f) "we don't know what our workers or members really think," (g) "what has happened to the old philosophy of an honest day's work for a fair day's pay?" are examples of inadequacies in (a) the Status system, (b) the Communication system, (c) the Functional Specifications, (d) the Reward system, (e) the Materials, (f) the Ideas, and (g) the Reenforcements, which inadequacies, individually or severally, can keep the society from realizing its goals of say progress and the provision of satisfactions to its members through providing them with the experiences of respect, creature comforts, control, understanding, capacity performance, and integrity, and hence may keep the members from the experiences of security, progress, and justice. Some stones are cracked or missing or the mortar has fallen out of place. If customary adaptive behavior and the human, social, and natural resources contained within the Structure of Living, are not available to correct these inadequacies the potential disequilibrium becomes actual.

One of the chief causes of disequilibrium is an inadequacy of Ideas. For instance, the social behavior may have to involve cooperative action with groups

or individuals both inside and outside the membership of the organization whose individual Structures of Living are distinctly different at important points from that of the group concerned, so that possibly the very words used in carrying on the relationships have different meanings for each party. By "wages," for instance, the manager may mean "an item on the cost sheets," the union leader, "a symbol of political service," the worker, "a means of livelihood." Each meaning may be valid in terms of the compulsions of the individual Structure of Living of the person who uses it that way, but his ideas do not include a conception of its meaning for the other fellow.

Another good example of this situation is the manager who does not understand the political elements in the union leader's Structure of Living and therefore classifies him as personally irresponsible. The stock of Ideas is large with respect to personally motivated conduct and meager with respect to institutionally motivated conduct. The same thing is true with respect to the labor leader who has an insufficient understanding of the compulsions exerted on a manager as a participant in a company, that is a business, "society."

It is, of course, possible that the Ideas are adequate but that the Educational system has failed to bring them to the attention of the appropriate people in the organization.

The inadequacy, moreover, may be in the customary social behavior itself, which is not making full use of the opportunities available with resources which would be perfectly adequate if fully utilized.

It is well to remember that an inadequacy is defined relative to the Goals of the group or individuals. It may arise, therefore, from no change whatever in the existing Resources, which up to the moment were reasonably adequate. The same Resources may, however, become inadequate if the goal experiences desired by men undergo a change. The coming of a union may, for instance, create a different concept of what "control" or "respect" could mean. In relation to that modified Goal, the once adequate Resources are no longer adequate. With them the society can no longer achieve its objective of providing its members with adequate satisfactions.

Another problem potentially productive of a disequilibrium is an inconsistency between different parts of the Structure. This is frequently an inconsistency between some Bond of Organization which suggests one type of social behavior, and a Reenforcement, say in tradition or popular philosophy, designed to support another type of behavior; between, for instance, customary monopoly behavior and "free private enterprise." Or the Status system in a company or a union may call for a degree of deference to authority which does not jibe with the workers' or members' philosophy and traditions with respect to the dignity and worth of the individual. Functional Specifications in either organization may call for action inconsistent with that labelled as ethical by the Ideas and ideals of group and reenforced by faith and ritual.

Still another producer of disequilibrium is a rigidity within the Structure of Living. Since many of the elements in the Structure of Living are patterns

of behavior, and behavior is dynamic, small or large modifications are constantly being made in the pattern itself. Also new Materials, People, and Ideas are continually introduced. Such modification places stresses and strains on other elements in the Structure of Living and, if they lack adaptive flexibility, a disequilibrium is set up. A few examples drawn from our studies of companies will illustrate this situation of rigidity.

In one plant the Functional Specifications were redefined involving men in new relations to the work-flow and the people in it; but the Communication system providing for clearance of information between men doing the various jobs was not changed. The route and media of communications workable under the old set-up broke down finally because the old initiators of communication were not as readily available, and because verbal explanation, the chief medium, was impossible. In a textile mill a change in Technology in the way looms were operated resulted in a change of Functional Specifications which placed men in new Status relations to each other. The workers among themselves, and in relation to their foremen, tried to maintain the old directive and representative aspects of the former Status system, however. The coming of a union into another plant made necessary considerable modification in Functional Specifications, the Communication system and the Reward and Penalty system, to which changes the old Status system found difficulty in adapting. The Status system is one of the most rigid and hard-to-change elements in the whole Structure of Living. It is no more so, however, than Reenforcements in the form of philosophy, symbols, slogans, and ritual, which are continually invoked to support new forms of social behavior to which they have little relevance, as when the slogan and philosophy of "free private enterprise" is used to justify enterprising activity which is neither free nor private, or when the slogan the "right of free men to strike" is invoked to justify a strike called by union leaders for political purposes unrelated to the welfare of the "free men" who do the striking.

A particular kind of rigidity lies in the failure of social behavior to incorporate adaptive inventive or experimental practices which exploit fully opportunities which are perfectly possible within the existing Structure of Living. The human, social, and natural Resources may be adequate for goal realization, but the customary behavior which could exploit these resources is rigidly fixed, inhospitable to variation, and following routine paths which leave the members of the society short of that degree of goal realization which is within their grasp.

Rigidities in the Structure of Living are apt to become pronounced when the problem is interpreted as a threat to the Structure of Living. That threat may be imposed from the outside or from the inside. Any society, be it a company, a union, a family, a nation, exists in a world where other societies are present. Often they are in competition with each other. The efforts of one to accomplish its own purposes may provide a threat to any or several elements in the Structure of Living of another society, or indeed to its very survival as a society. One company "society" may do that to other company "societies." A union "society" or a government "society" may do that to a company "society." A company or government "society" may do that to a union "society." One union

"society" may do it to another. The examples could be multiplied. Under the impact of such a threat, the Structure of Living, which formerly had provided the participants with the experience of security no longer does so, and, as we shall see, the response is likely to result in making the threatened Structure of Living even more rigid in an effort to strengthen it against threats.

The threat may also come from the inside, as when the behavior of some sub-group, or even individual, within the society threatens to destroy some accustomed and depended on element in the Structure. To the management members of the society for instance, the refusal of workers to work on piece rates or their joining a union may be a threat to the Status system as they experience it, and a normal response is to strengthen the existing Status system, making it still more rigid.

The types of disequilibrium named will show up as inadequacies in the individual Structures of Living of some of the members of the society, though the intensity with which they are experienced will vary as between individuals. Theoretically any disequilibrium in any part of the group's Structure of Living affects all of the members, but the effect may be so mediated that particular members are not aware of it.

As we have indicated before, however, a disequilibrium in an individual's Structure of Living may arise from inadequacies in the Structure of Living of other societies of which they are members. Inconsistencies may be between elements provided by these other societies and those provided by the company or union society under consideration.

This fact furnishes one of the most troublesome of problems for those responsible for obtaining teamwork in that company or union; for the modification of the group Structure of Living over which they have some control will not necessarily reduce the disequilibrium in the individual Structures of Living. It is difficult for any modification in a company's Structure of Living, for instance, to reduce anxieties of an individual which grow out of inadequacies in the family or religious societies of which he is a member.

If, however, the elements in the company or union Structures of Living are adequate to provide those member satisfactions which they can be expected to provide, the very contrast between life within these societies and that in the inadequate societies may be a factor making for appreciation of the former on the part of the member experiencing the contrast. It is no secret, for instance, that satisfactions in membership in a union society is frequently heightened by the experience of inadequacies in the company society, and vice versa.

Disequilibrium Not Necessarily Unhealthy

In applying the word "disequilibrium" to situations of this sort we do not imply that equilibrium is "good" and disequilibrium is "bad." The moral judgment is irrelevant in any case, for the Structure of Living is never in a perfect state of equilibrium. Since the Structure of Living contains Goals in terms of

desired experience or achievements, and Bonds of Organization which are, in reality, patterns of normal social behavior, and since experience and behavior are dynamic, changing things, any equilibrium, in the sense of a permanently stable balance of elements, is impossible. The most that can be hoped for as an indication of the "health" of a society is that its participants shall be behaving in such a way that the Structure of Living becomes more adequate, more consistent, more flexible, and, therefore, more competent in problem-solving. In other words, that society is healthy in which, on the appearance of a potential disequilibrium, behavior is set in motion which effectively tends to correct the situation. The society has within it the capacity for the correction of such inadequacies, inconsistencies, and rigidities, as may arise to prevent social behavior from solving problems effectively.

It is not accurate to call a society potentially in disequilibrium for these reasons, therefore, an "unhealthy" one. Indeed a potential disequilibrium may promote health. If, for instance, it results from the fact that goals have been lifted to a higher level, the corrective activity may leave the society more "healthy" than before. Furthermore, as we shall see in a moment, even an actual disequilibrium is at the root of inventive behavior which may (though not necessarily so) produce great improvements in the Structure. If the word "unhealthy" is to be used, it should be applied either to a situation in which the degree of disequilibrium is so great that the purpose of the organization and the goals of participants cannot be reasonably approximated, or to one in which the disequilibrium, instead of being corrected, is increasing.

Adaptive Behavior

Whatever the degree of potential or actual disequilibrium in a society that disequilibrium furnishes a stimulus to "adaptive" behavior on the part of the participants to remove the inadequacy, to resolve the inconsistency, to reduce the rigidity and restore flexibility. This "adaptive" behavior, as we have seen, may constitute a part of the customary social behavior of the group, as, for instance, in conforming behavior incidental to the operation of the "grievance" procedure or legislative or research processes, or it may be inventive and experimental. The latter forms of adaptive behavior are normally found only when conforming adaptive behavior is inadequate to accomplish results.

We should re-emphasize that there is a sense in which all behavior is adaptive. The most routine customary acts of individuals or groups are adapting acts. In every case the individual or group is solving through behavior some problem, that is overcoming some difficulty or exploiting some opportunity, and is adapting through that behavior, not only to the problem as interpreted, but to the fact that Goals and Resources are what they are, and that in the pursuit of given Goals and utilizing existing Resources, some kinds of activities are more likely to be successful than others.

The thing which distinguishes "conforming" from "inventive" adaptive behavior is that the former is following a path broken by previous behavior whereas "inventive" behavior breaks new paths. The latter is the source of

variation in customary behavior and, as we shall indicate, if successful, is eventually incorporated into the body of customary behavior. This is true, of course, only if the problem which called it forth is a continuing or recurring one.

Clues to all observed behavior in a society cannot be found, therefore, merely by describing the Structure of Living of that society and by assuming that observed behavior is suggested by the patterns of customary behavior found therein. Further clues, however, may be obtained by estimating the potential or actual inadequacies, inconsistencies, and rigidities in that Structure and relating such observed behavior to these as possible attempts to correct them.

Difficulties Arising from Inventive Behavior

Inventive adaptive behavior, while designed to correct a disequilibrium in the Structure of Living of an individual or group, may, however, raise problems of its own. This is obvious in the case of the attempt of an individual to correct a disequilibrium in his individual Structure of Living. Consider the simple example, not unusual in recent years, of the foreman for whom the Status system within the company became inadequate after the entrance of the union. In an attempt to correct the inadequacy, he began to discriminate against his men if they were union members. His action, among other things, altered the Reward and Penalty system for these men and made it inadequate for them.

The repercussions of the inventive behavior of one person are felt by others as a modification in their Structure of Living, and, if this modification is unfavorable, it will give rise to adaptive behavior on their part. Were that adaptive behavior to take the form of a strike, the Structures of Living of many others would be modified. In other words, inventive adaptive behavior sets up a chain reaction.

The results illustrated above are not intended to suggest the generalization that inventive adaptive behavior by some individuals always has the effect of reducing the adequacy of the Structure of Living for others. Indeed it may have quite the opposite result. It is only suggested that, since the stuff of the Bonds of Organization is dynamic behavior, the modification of the behavior of one participant changes for better or for worse the character of some bond or bonds for others.

Inventive adaptive behavior designed to remove an inadequacy, inconsistency or rigidity within the group Structure of Living has similar consequences. But new complications are introduced when we are considering behavior designed to reduce a disequilibrium in the group's Structure of Living. We have, let us say, an inadequate definition of the organization's Goals, or the Communication system is inadequate to convey information about these to all members of the organization. Inventive adaptive behavior is initiated only when some person (or persons) realizes this fact, recognizes it as productive of a disequilibrium in his own or in the group's Structure of Living, and decides to do something about it. If that person were the president of the company, and he

recognized that the inadequacy arose because of his own failure to perform according to his Functional Specifications, the corrective procedure is simple. But if it were recognized, say, by the head of the personnel department, he would have to involve many others, including the president, in the adaptive behavior designed to correct the situation. The same situation would occur if the person were a steward in a union who recognized that a failure of the union's president was the heart of the difficulty.

It is seldom that all members of a society simultaneously become aware of a certain type of potential or actual disequilibrium in their group Structure of Living and decide to do something about it. In most societies, moreover, there are particular people, usually defined as leaders, whose job descriptions impose special responsibility for the spotting of inadequacies, inconsistencies, or rigidities. Even when a disequilibrium becomes clear to them, it may not be obvious or even evident to others who would have to be involved in any corrective action. As long as there is no awareness of a potential or actual disequilibrium there is no stimulus to inventive adaptive behavior.

Those observing the society from the outside may see what they believe to be a disequilibrium, and wonder how members of the society can be so blind or so "dumb." Reformers have constantly been in this position. "How can the craft unions be so blind that they do not see the skill characteristics of their members are being modified by Technology and that this calls for a modification of their Organizational Charter to provide a broader than craft basis for membership?" "How can employers fail to see the anomaly of declaring, 'My door is always open' when the numbers of his people and the impact of an elaborate Status system in the company makes it impossible for the ordinary worker to make use of that avenue?" "Why can't union leaders see the inconsistency between their declared purposes of gaining more freedom and control and chances of expression for workers, and their Status systems which are as autocratic as those in business?" "Why can't employers sense that a rigidity in their Functional Specifications and Status system, severely limiting the functions they will carry on through teamwork with union leaders, is retarding their contribution to the achievement of the Goals of their company to make progress and provide maximum satisfactions to the members of the company?" How frequently do we hear comments of this sort from those inside as well as those outside the organization under consideration!

The answer to such questions is four-fold. Either those responsible for acting and with authority to act do not recognize that a disequilibrium exists; or they do not interpret the situation in the same manner as the critic; or they are afraid that corrective action would produce other types of disequilibrium which they are not prepared to deal with; or they are aware that others in the society whose cooperation would be essential for corrective action do not share their judgment. Since the outside reformer, if he is an individual, and the inside critic, if he carries little influence, are relatively less powerful as rewarders and punishers than those inside the organization who do have such power, those responsible for modifying the Structure of Living are inclined to "let well enough alone" and even to resent the criticisms.

The point of the foregoing discussion is that inventive adaptive behavior must be initiated by a person or persons who sense a disequilibrium in their own Structure of Living or in that of the society for whose effectiveness they have peculiar responsibility, and that, if the indicated correction goes beyond their personal activities, they must enlist a number of others in the society in a consensus that their judgment is correct. They must, moreover, consider whether the corrective action necessary would not create further kinds of disequilibrium in their own or the society's Structure of Living. To an individual it may be perfectly clear that an excessive personal debt (that is, a negative condition in his material resources) is a disturbing condition of his Structure of Living, and that adaptive behavior to reduce the debt is called for. To those responsible for action in the Congress of the United States, an excessive national debt may not appear disturbing in the nation's Structure of Living, and adaptive behavior to reduce the debt may promise such additional kinds of disequilibrium in their own Structures of Living (in its political aspects) and indeed in the Structure of Living of the nation as a whole, that they refuse to consider it an evidence of disequilibrium which should be corrected.

Illustrations of this difficulty created by initiative, experimental behavior could be multiplied. Whether or not practical men have studied social science, they sense that the parts of a Structure of Living "hang together," that invention in one area makes necessary adaptation in other areas. The proponents of socialized medicine, of Federal control of unions, and other "inventive" actions are often scornful of the cries, raised by those within the society whose operations are severely modified by such actions, to the effect that "this leads to socialism" or "this leads to Facism." Social scientists frequently belittle such arguments as "scare tactics" or at least unwarranted generalizations.

No doubt such characterization is frequently justified. Whether or not the end result for the Structure of Living, however, coincides with such labels, this much is true. Any invention in a part cannot exist in isolation from other parts and from the whole. It must be integrated with the whole and this integration involves modification of the other parts. Since the goal realization of many, if not all, members of the society is geared to the existing Structure of Living, it is not strange that they look with anxiety on such modification, considering it a threat to that Structure of Living which has heretofore provided them with a satisfactory framework for successful living. Though the prediction of the end result may be exaggerated and miscalculated as to trend, it is a reaction which points to a major difficulty arising from inventive behavior. Though effective in reducing the inadequacy of a part, it may require modifications in other parts which make them inadequate for problem-solving.

The opposition to such inventive behavior on the part of those affected by such direct or secondary modifications is one of the strengthening features of a free society. Exaggerated appraisal of such consequences is the price paid for the assurance that the chain reaction of such inventive behavior shall be more thoroughly explored than would be the case if inventive behavior was given a green light. Since the well being of every member of a society is dependent on the adequacy, consistency, and flexibility of the whole Structure of Living as well as on the adequacy of any of its parts, such "conservative" activity performs a most important function.

A disequilibrium in the Structure of Living of a group, then is a stimulus to inventive adaptive behavior of a social nature only when it is recognized as such by those whose own personal Structures of Living are affected, by those with peculiar responsibilities for the effectiveness of the group's Structure of Living, and by those whose cooperation would be necessary in any corrective action (unless those who do sense the disequilibrium have the power to compel performance of the latter.)

One other complication should be mentioned. Since emphasis has been placed on awareness that a disequilibrium exists, it must be conceded that this awareness might be illusory. Several generations of Marxists within the labor movement, for instance, have been disappointed by the failure of American workers to accept their interpretation of affairs indicating a particular kind of disequilibrium in the Structure of Living of those workers. It is at least arguable that these would-be-initiators of adaptive behavior have miscalculated the objective situation, and that taken as a whole the Structure of Living of American workers is more adequate, consistent, and flexible, than they have assumed.

Likewise the judgment of many paternalistic employers that no disequilibrium exists in the Structure of Living of the paternalistic company's "society," which they have had so large a part in shaping, may be illusory. Objectively, for instance, there may be a serious disequilibrium in that company Structure of Living between the Status, Communication, and Reward and Penalty systems, and the Ideas concerning the right of the individual to determine his own destiny shared by a large majority of the participants.

In other words the initiating adaptive behavior stimulated by a disequilibrium in the group's Structure of Living is much more complicated so far as its incidence and implementation is concerned than that stimulated in an individual by a disequilibrium in his personal Structure of Living. This is one reason that direct inferences cannot be made from individual to social behavior and why social psychology cannot be developed by analogy from individual psychology. To date the most careful scientific work in human relations has been done by those who have focused their observations on individual behavior on the one hand and on institutional or group behavior on the other hand. The area of study involving the explanation of the social behavior of individuals has taken its clues from one or the other of these "respectable" bodies of generalizations. The purpose of suggesting the present framework for the study of why men behave as they do is to build a bridge between these two approaches from which may be surveyed all the factors which result in behavior of significance to the individual and to the society of which he is a part.

Psychological Basis for Adaptive Behavior

The psychological basis for adaptive behavior is probably the fact that individuals who are kept from the experiences we have labelled Goals are conscious of tensions and anxieties which they would like to reduce, or hopes which they would like to fulfill. Tensions describe an experience of the human organism relevant to an existing situation which produces obstacles to goal realization.

They would be described by a person as dissatisfaction, unrest, discontent, etc. Anxieties describe an experience of the human organism relevant to a future situation which presents potential obstacles to goal realization. They would be described by a person as worry, fear, concern, misgiving, apprehension, etc. Hopes describe an experience of the human organism relevant to a present or future situation presenting potential but unexploited opportunities for goal realizations. In other words, hopes are the product of that form of disequilibrium in which rigidities in the customary behavior result in incomplete exploitation of opportunities offered by other elements in the Structure of Living. They would be described by a person as aspiration, expectancy, elation, etc.

In summary, the tensions, anxieties, or hopes produced by a potential or actual disequilibrium in the Structure of Living are the stimuli to adaptive behavior on the part of its members.

These psychological states exist in individual people. The only sense in which a group can be said to experience tensions, anxieties, and hopes, is that a significant number of people in the group are having the same experiences. A disequilibrium in the group's Structure of Living does not produce these experiences in the group. It produces the experience in one or more individual members of the group. The line of causation therefore involves the translation of a disequilibrium in the Structure of Living of the group into one in the Structure of Living of one or more individuals, the latter becoming the immediate producer of tensions, anxieties, or hopes in the individuals concerned.

Process of Adaptive Behavior

In order to reduce those tensions and anxieties or to fulfill those hopes produced by a potential or actual disequilibrium in the Structure of Living, men search for suggestions for adaptive behavior which will accomplish their purpose. By suggestions we mean alternative answers to the question, "What can be done about it?" in terms of proposals for definite action. The analysis of our observations of actual behavior indicates that the source of suggestion may be any one of the following or a combination of these. In the order of their importance in our investigations to date they are:

1. The customary adaptive procedures available within and suggested by the Structure of Living itself.
2. Experienced successful action in the past with respect to an analogous situation.
3. Proposals or orders from leaders or authorities.
4. Adjustments implicit in an analysis of the facts.
5. Logical implications from action principles, philosophy, or faith.

The first three sources are normally relied on initially, a particular source usually being checked by individuals against the other sources. Suggestions from successful past experience are especially resistant to modification if inconsistent with suggestions from other sources. Over time, those sources of suggestion will be trusted which most consistently suggest action possibilities which prove successful in promoting or restoring a working equilibrium in the Structure of Living. But people will turn to unaccustomed sources if the old ones fail them.

Cues

Whatever the suggestion may be or from whatever source it may come, it must be connected with a cue which from experience or present exposition, the people who are to act recognize as a signal for action. It is at least a plausible hypothesis that the first three sources of suggestion named above are more frequently productive of adaptive action than the last two because, in their case, the cues which signal action are more adequately developed and recognized. The steward who stands for the grievance procedure in the Structure of Living is visably present. It is a common observation that action suggested by an analogous experience is frequently undertaken on the assumption that the appearance of an analogous cue indicates the existence of a similar situation, and hence suggests similar action. For instance, an announcement that jobs are to be retimed is almost universally accepted by workers as a signal indicating that "action appropriate to resisting a hidden wage cut" should be taken. The announcement of specific union demands is almost always accepted as a signal to management that "action appropriate to demonstrating the undesirable character of those demands and whittling them down" should be taken. The order or advice of a leader or authority is a well established signal for action.

From the roster of alternative suggestions those adaptive actions are taken or initiated which appear most likely to remove the causes of a potential or actual disequilibrium; by direct methods to exploit opportunities and hence fulfill hopes; by direct methods to reduce inadequacies, restore consistency, remove rigidities; or by indirect methods.

Types of Adaptive Behavior

On the basis of our present investigations we cannot predict the exact type of adaptive action which will appeal to persons, as individuals, or as members of a group, as most likely to provide them with the experience of goal realization. Further study, we hope, will yield more precise possibilities of prediction. We can at this point say only that people, under the stimulus of potential or actual disequilibrium, have been observed to act along several lines. These are listed below in the order of their apparent frequency.

1. Use adaptive procedures, such as the grievance machinery, the decision-making process, the legislative or the research process within the existing Structure of Living.
2. Initiate direct action more fully to exploit opportunities provided by the Structure of Living.
3. Initiate direct action to meet any threat to the Structure of Living by:
 - a. Strengthening the elements under attack.
 - b. Attempting to dominate, compromise with, or integrate through cooperation, the attackers.
4. Initiate direct action to modify the elements in the Structure of Living to:
 - a. Improve the elements which fall short of adequacy.
 - b. Restore consistency by modifying the most pliable of the inconsistent elements.
 - c. Restore flexibility by modifying the rigid element.
5. Undertake indirect action such as:
 - a. Accept the situation and do nothing about it.
 - b. Accept the situation with the intention of waiting until the moment for remedial action is more opportune.
 - c. Seek compensatory satisfactions in areas of activity fully available.
 - d. Redefine goals in the attempt to close the gap between objectives and possibilities.
 - e. Move out of the society.

We may now assume certain situations and illustrate the type of adaptive behavior falling within these several types.

First assume a worker who has been with the company 15 years and for the past 5 has "matured" at a certain occupational and rate classification two steps from the top. His desired experience of progress is frustrated and on a certain day his experience of justice is reduced by the promotion to a classification above him of a "youngster" who has been with the company only 5 years. For him a disequilibrium exists in his Structure of Living because that part of the Reward system defined by the company's promotional procedures appears inadequate. What types of adaptive behavior are possible for him? The numbers refer to the foregoing list of types.

1. He may present a grievance through the grievance procedure.
2. He may buckle down to his present job in the hope of demonstrating his superiority to others.
- 4a. He may urge through his union that seniority arrangements apply to promotions as well as lay-offs.
- 5a. He may do nothing about it.
- 5b. He may do nothing for the moment but lay plans for some type of action in the future.
- 5c. He may turn his chief interests and energies to a hobby outside the shop, become increasingly active in union affairs, or he may lie down on the job and even engage in "job action" including sabotage.
- 5d. He may put up with the situation by defining at a lower level what degree of progress and justice he will be satisfied with.
- 5e. He may quit.

Now let us assume a plant manager whose employees have voted to be represented in collective bargaining by a union. They are demanding that the union have a voice in determining the planning and operation of a safety program and the incentive system. These demands he considers to be a threat to the Functional Specifications and the Status system of the company as well as to these elements in his own Structure of Living. For him a disequilibrium is produced which keeps him from realizing his Goals of security, respect, and control. He experiences both tensions and anxieties. What alternatives are open to him?

1. He may attempt to get an agreement in the collective bargaining (legislative) process on a clear-cut definition of management's rights.
2. He may step up communications with his employees seeking to convince them of the values to them personally and to the group of preserving a "free management."

- 3a. He may strengthen his Functional Specifications and position in the Status system by getting more explicit authorization from his board of directors or by increasing his acceptance, in certain directive functions and status, by his employees through method 2 above.
- 3b. He may attack the union leaders as "tools of Moscow" as "misleaders of labor"; he may agree to trade off the commitment not to press for the two demands, for a wage increase, or an agreement to alter the managerial administration of the safety and incentive systems; or he may move to accept the union representatives as consultants or even specific participants by clearly outlining the boundaries of their functions.
- 5a. He can't very well do nothing.
- 5d. He may redefine what he means by security, respect, and control to include the experience of these in partnership with union leaders.
- 5e. He may retire or accept employment in some company "which isn't troubled by unions," or "which has a 'reasonable' union."

Now let us assume a union member who has had a series of grievances which he considers the union has mishandled and which, uncorrected, are causing him no end of trouble and are keeping him from the experiences of security, justice and control. What may he do?

- 1. He may appeal to union officers higher than his steward, or he may move in union meeting for a full consideration of his case.
- 2. He may short-circuit the union machinery and go directly to management with his troubles.
- 4a. He may move in union meeting for a correction of the grievance procedure and its administration.
- 5a. He may "take it."
- 5b. He may "take it now" but bide his time until he can "get even" or do something more positive.
- 5d. He may try to understand the situation in terms of what results can be expected, things being what they are, and be satisfied with less security, justice and control.

- 5e. He may quit the union or move to another plant where "the union is more effective in doing things for the boys."

Fate of Adaptive Behavior

If the adaptive action is rewarding, that is if it results in a greater approximation to equilibrium in the Structure of Living and hence reduces tensions and anxieties or turns hopes into realizations, it tends to be repeated and perpetuated. If it is inventive, it tends to become customary social behavior, and hence an element in the Structure of Living.

If the adaptive action is punishing, that is if it fails of its purpose, fails to result in a greater approximation to equilibrium in the Structure of Living (it may even intensify the disequilibrium) and hence increases tensions or anxieties or reduces hopes, another type of action is tried until one is hit upon which, in practice, is rewarding. If it is of the customary variety a question is raised as to its adequacy and an incentive is provided for its non-repetition and eventual elimination from the Structure of Living.

IV
SUMMARY OF PROPOSITIONS
RELATIVE TO ADAPTIVE BEHAVIOR

Before proceeding to describe the uses to which facts gathered within this framework of investigation may be put, it will be well to summarize our propositions contained in the foregoing discussion.

1. An organization (say, a company or a union) is a small society. That is to say, it is composed of varied individual people who have available to them certain natural, * human, ** and social *** resources, and who are related to and work with each other, materials, and ideas, within a framework of certain organizational devices or systems toward an organizational objective.
2. These systems through which people (and the materials and ideas with which they work) are bound together into a functioning whole, may be classified as the following "bonds" or devices of organization. Here they are merely named.

A. Those Linking People With Other People.

1. Organizational Charter
2. Functional Specification System
3. Status System
4. Communication System
5. Reward and Penalty System

B. Those Linking Materials, and People with Materials.

6. Technology
7. Services

C. Those Linking Ideas, and People with Ideas.

8. Thoughtways
9. Educational System

*Natural resources are land, fauna, flora, climate, etc.

**Human resources are (a) substantial qualities of persons, such as physical, mental, and emotional equipment, and (b) substantial abilities, such as skills, insight, wisdom, faith.

***Social resources are people, materials, and ideas.

3. The significance and effectiveness of each aspect, part, or technique in the organization (e. g. house organ, union paper, incentive plan, wage rates, seniority agreement, pension plan, organizational charts, etc.) is determined not only in terms of what it is in itself but in terms of its relationship to one of these systems or "bonds" of organization.
4. The test of effectiveness of these resources, systems or "bonds" of organization and reenforcements* is their degree of positive contribution to the goals and objectives of the organization as a whole.
5. The test of efficiency of these resources, systems, or "bonds" of organization and reenforcements* is their degree of positive contribution to the goal realization of the participants in the organization.
6. The goals for the organization as a whole are defined by those within the group responsible for this matter. Most applicable to all organizations, regardless of type, are survival, progress, contribution to satisfactory living for members. More particular goals vary with the nature of the organization.
7. The chief goals held by the participants in an organization that is, those in their individual Structure of Living, are as follows:
 - A. The experience of:
 1. Security in,
 2. Progress toward,
 3. Justice with respect to,
 - B. The following experiences considered to be standards of successful living in terms of their own environment and experience.
 1. Respect to one's fellows,
 2. Creature sufficiency,
 3. Control of own affairs,
 4. Understanding,
 5. Capacity performance,
 6. Integration or wholeness within oneself and in relation to the world of things and people about one.

*See item 9, below.

8. The customary social behavior of a group is what it is because it is designed to solve problems (i. e. exploit opportunities and overcome difficulties) by the use of the resources available, so as to achieve the goals held.
9. The customary social behavior is stabilized and given the character of rightness by the employment of reinforcements in the form of (1) selected dogmas of philosophy and faith, (2) pertinent items of folklore, literature, and art, (3) slogans, (4) verbal, written, human and material symbols, (5) ritual, (6) codes and laws.
10. A Structure of Living results, for the group as a whole, and for each of its members. The goals of the organization, the human, natural, and social resources and bonds of organization as experienced by its participants, the social behavior which has resulted from the attempts to achieve the first in the light of the opportunities and obstacles presented by the second, and the reinforcements for this behavior constitute the Structure of Living of the group within which the participants live and work. This Structure of Living is the framework of their society and exerts important influences on their behavior within it. The same concept of a Structure of Living can be applied to sub-groups and to individuals within the society. It should be further recognized that many of the problems which a group faces in using and adapting its Structure of Living so that it is effective and efficient, arise from the necessity to reconcile and integrate behavior tendencies among its members which are stimulated and conditioned by their individual Structures of Living, which in turn, are greatly influenced by their desire to be at home in and successful within group Structures of Living that involve many others who are not members of the society, that is, of the organization, in question. This is one major reason that the group Structure of Living is not identical with the sum of the individual Structures of Living of its members.
11. The observed behavior of groups or individuals always involves a utilization or modification of this Structure of Living in order to solve problems (i. e. to exploit opportunities or overcome difficulties.)
12. These problems have certain characteristics:
 - a. They may arise for the group as a whole, for sub-groups, or for individuals.
 - b. They may be old or new.

- c. They may arise within or outside the Structure of Living.
 - d. They may be positive or negative in tone, that is, they may appear either as opportunities or difficulties.
 - e. Whatever their ultimate nature they always are presented in proximate terms as a problem of utilizing or modifying the Structure of Living, because the Structure of Living is a tool for their solution and because the problem itself is interpreted in terms consistent with the Structure of Living.
13. The influence on problem-solving behavior of this Structure of Living of the organization or of individuals, is exercised primarily in two ways. First of all the individual is impelled to conform, that is, to fit in, by engaging in conforming adaptive social behavior suggested and reenforced by the Structure of Living. Second, he is impelled by the actual inadequacies of, inconsistencies within, rigidities of this Structure of Living in the face of given problems to engage in inventive adaptive behavior seeking to correct the situation.
 14. The condition of the Structure of Living which stimulates "adaptive behavior" has been defined as one of potential or actual "disequilibrium." Specifically a potential disequilibrium is a condition of an experienced inadequacy, inconsistency, or rigidity within the Structure of Living which may be corrected by adaptive procedures and available resources embodied within that existing Structure of Living. Customary social behavior (as in action using the grievance or research procedures available) may "put the situation to rights." An actual disequilibrium is a condition of experienced inadequacy, inconsistency, or rigidity, within the Structure of Living, for which no adequate corrective behavior or resources are present within the existing Structure of Living. The Structure of Living does not contain self-corrective elements. Inventive adaptive behavior to modify it is required.
 15. The adaptive behavior, it will be noted, may take either conforming or inventive forms. It may be conforming, i. e. merely the use of adaptive procedures provided by the existing Structure of Living. Or it may be inventive, i. e. involve the initiating of action which merely exploits more fully its existing elements, or the initiating of action to modify inadequate, inconsistent, rigid or threatened elements in the structure, or to attack those who threaten the structure. Or

it may be indirect action such as waiting, compensatory activity, redefining of goals, or moving out of the society.

16. The psychological basis for conforming adaptive social behavior in the face of normal problems is the experience ease and dependability, and correctness which is had by those who conform to the behavior suggested and reenforced by the Structure of Living.
17. The psychological basis for conforming adaptive social behavior in the face of problems revealing a potential disequilibrium in the Structure of Living is the same plus the tensions, anxieties, and hopes stimulated by this potential disequilibrium.
18. The psychological basis for inventive adaptive behavior is the tensions, anxieties and hopes stimulated by an actual disequilibrium in the Structure of Living.
19. Adaptive behavior to reduce tensions and anxieties or to fulfill hopes is suggested by several sources among which customary and approved procedures within the existing Structure of Living, past experience with analogous situations, and the proposals of leaders or authorities are the most important. But adjustments implicit in an analysis of the facts, and adjustments which are logically deducible from action principles, philosophy, and faith, cannot be ignored.
20. The suggestion, if it is to be utilized, must be associated with an appropriate cue or signal for action.
21. Adaptive behavior which is rewarding tends to be repeated and perpetuated as a part of the Structure of Living; that which is punishing tends to be discarded in favor of alternatives which promise to be more rewarding.

IMPLICATIONS FOR ANALYSIS OF OBSERVED BEHAVIOR

These twenty-one propositions are set down merely as a framework for investigation and as a set of probable cause and effect relations which appear promising as a basis for a theory of behavior which can assist those charged with the organization and leadership of human beings in functioning teams to understand their own actions and those of the people they organize or lead.

It is, at the very minimum, a framework which provides a systematic way of classifying all the factors which may determine the behavior of participants in a particular functional group. That is the objective the author has in mind. If some significant determinant of human behavior cannot be fitted into this framework for analysis, then the framework is incomplete and must be modified to take account of that determinant.

Such a comprehensive framework is essential as a starting point in the development of valid and useable principles of cause and effect in human behavior. It is essential, if for no other reason than that the study of particular relationships, say between wages and worker mobility, or between authority and human response, are likely to go awry unless these matters are seen in relationship to the whole set of forces which stimulate or condition particular kinds of observed behavior. The long and frequently abortive debate between the proponents of heredity and environment, or that between the students of human nature and social nurture, are examples of competitive argument which might better have been turned into cooperative study, and could have been, had the specialists involved shared a common conception of the nature of their problems in attempting to explain human behavior.

The arguments among the economists assuming their "economic man," the political scientists assuming their "political man," the sociologists and anthropologists assuming their "social man," the theologians assuming their "religious man," are equally unrewarding. The psychologists, even within their own ranks, are not unfamiliar with the fallacy of incomplete generalizations on the basis of incomplete facts related to a limited conception of the object of study. The lack of confidence between the practical and the academic men is certainly a further example of the result of each having a picture of the total problems which did not comprehend the facts experienced by and considered significant by the other.

The solution of the many problems of human relations posed by our contemporary society is too imperative to permit the channeling of effort of intelligent and competent practitioners and scientists into the defense of theories of human behavior based on the classification and analysis of those facts they are aware of merely through their own experience and which their particular craft alone has led them to believe significant. But the starting point for more

fruitful effort is an agreement upon a comprehensive picture of the determinants of human behavior and the resulting recognition on the part of each of the relationship of his particular conclusions to those of the men who are exploring other areas.

The framework for classifying the factors determining human behavior and the cause and effect relationships suggested in this book are offered as such a starting point, to be corrected and amplified by those, whether in academic or practical life, who are observing the facts of human behavior and are trying to make systematic sense out of what they observe. That it is a starting point for developing a theory, and not the theory itself, should be obvious. In the words used to describe the Structure of Living it is a "Thoughtway" not a comprehensive stock of "Ideas." It is a way of observing, and of thinking about the resulting observations.

Practical Implications

If this conception of the company or union as a small society, the nature of that society, and the impact of life within it on participants are accepted as valid starting points, what implication would this approach have for the explanation of particular examples of human behavior and for indicating appropriate action on the part of those responsible for organizing and leading human beings?

First of all the facts of the Structure of Living of the particular society (say a company or union) would have to be understood as they are realized in the experience of the participants. Such an understanding would necessarily be based on statements from the participants themselves. It is difficult to see how, without information of this sort about the Structure of Living of the group, one can interpret behavior as influenced by it.

Second, the particular Structures of Living of those sub-groups within the society whose behavior was involved would have to be understood, as would be the Structure of Living of related and general groups with whom participants are associated. Whether that group is top management, middle management, foremen, a particular group of employees, or union officers, their particular Structures of Living containing elements furnished by life, experience, and the environment outside, as well as inside of the company or union, would have to be known. It is frequently true that the Goals, Resources, Customary Behavior, and Reenforcements of these particular Structures of Living are what make the group's general Structure of Living inadequate for individuals. It goes without saying that, to the interpretation of the behavior of a specific individual, an understanding of his individual Structure of Living is relevant.

Third, standards for testing the effectiveness and efficiency of the organization's Structure of Living will have to be devised. These standards will have to disclose the degree of adequacy or inadequacy, consistency or inconsistency, and flexibility or rigidity within the Structure of Living; and if these standards are meaningful and useful they must be related to particular elements

in the Structure of Living, say the Technology, the Status system, the Communication system, Ideas, Materials, Educational system, etc.

At the moment at the Yale Labor and Management Center we have, on the basis of our research, developed standards of adequacy only for those Bonds of Organization which link People together in a team, that is for the Organizational Charter, and the systems of Functional Specifications, Status, Communication, and Reward and Penalty. The standards of adequacy for Human Resources and Character, for Materials, Technology and Services, for Ideas, Thoughtways, and Education, for the Natural Resources, and for Reenforcements have yet to be developed. Standards with respect to consistency and flexibility are still in a very preliminary form.

Fourth, by observing the correlations between the behavior of people and the degree to which the existing Structure of Living meets the standards devised, we must develop hypotheses of probable cause and effect which give an approximate answer to the question "Why do, or must, men behave as they do, and how will they probably behave in view of the situation as it appears to them?" This is the ultimate objective, for in such form will be stated the "Principles of Human Relations" which are declared and recognized to be needed by practical men and scientists alike. The development of such principles will involve the formulation of hypotheses after every investigation and the testing of them by reference to succeeding investigations.

This is a long range objective, one to be realized increasingly by successive generations of practical men and scientists. Yet if the conclusions from present investigations are relevant to an adequate and comprehensive framework of scientific effort, men who have to act now, not two generations hence, may do so with confidence that they are on the right track.

Immediate Application

Suppose that we have no satisfactory cause and effect principles at the moment which would guide the action of men who must solve today's problems in human relations in industry. Does the framework outlined in the foregoing pages suggest any guide to procedure? Does it suggest a systematic method for learning as much as possible of the facts which will test the effectiveness and efficiency of a technique before it is tried?

Examples of Problems

Let us set down two examples of problems, one for management, one for union leaders, in each of two important problem areas faced by each. The first one is this:

A. Unsatisfactory behavior of workers in an existing situation.

1. Management problem - Morale in the shop is low as evidenced by reduced production per man, high absenteeism, high turnover, large number of grievances, etc. WHY?
2. Union problem - Morale in the union is low as evidenced by failure to attend meetings, resistance to leadership, failure to pay dues, lack of support for union projects, etc. WHY?

The propositions as outlined would suggest that the behavior of this type was an example of experimental action on the part of workers to reduce tensions and anxieties resulting from a disequilibrium in the Structure of Living in which they find themselves involved. The achievement of some Goal or Goals is blocked. Some personal, social, or natural Resources is inadequate. Some inconsistency exists in that Structure. Some threat to some of their Resources looms large. The job is to spot these difficulties and remove them, thus increasing the opportunities for goal realization and promoting or restoring a state of working equilibrium in the Structure of Living.

Starting with the observed action we attempt a diagnosis by moving in reverse order back over the Propositions and ask:

1. What unreduced tensions or anxieties or unrealized hopes do these men have?
2. What is their source? What sort of disequilibrium exists in their Structure of Living? In what element or elements is it focused?
3. Using the outline of the Structure of Living as a check list we ask:
 - a. Is some element inadequate for goal realization? (Use the goals listed as a check list.)
 - b. Is there some inconsistency among parts of the Structure?
 - c. Is there a rigidity which interferes with satisfying achievement?
 - d. Is a threat present to some element in the Structure?
4. The trouble may be spotted at this point. If not, the failure to do so may lie in the unfamiliarity of the diagnostician with the facts concerning the Goals, Resources, and Reinforcements of the people whose behavior he is trying to explain.

B. The second problem area may be described as the necessity for predicting the anticipated reaction of workers to a change in the existing situation.

1. Management problem - Management wishes to introduce a new work standards program or a major technological change. What will be the effect on and the reaction of the employees of the company and WHY? What can management do to lower resistance and elicit cooperation?
2. Union problem - The union wishes to undertake an organizing campaign in the South. What will be the reaction of workers to alternative appeals and organizing tactics?

The use of the propositions to analyze the second type of problem would start with the questions:

1. At what points will the impact of this change be felt on the rest of the Structure of Living? (Use outline of the Structure of Living as a check list.) How readily can the Structure be modified at these points to adapt to the change?
2. Will it make certain present personal, social and natural Resources more or less adequate?
3. Since the innovation now may become a part of the Structure, does it remove an existing inconsistency or does it introduce one?
4. Does the innovation remove an existing threat to some important element in the Structure of Living or does it introduce one?
5. How will this change affect the progress of these men toward their goals? (Use list of goals as a check list.)
6. In other words, does the innovation lessen or increase anxieties, tensions, or hopes? Does it promote or restore a working equilibrium, or does it introduce disequilibrium?

If the latter result is to be expected, can the initiator of the change suggest parallel adjustments or behavior which will mitigate the disturbing effects of his innovation? In other words, can he become the source of suggestion for adaptive behavior?

If he concludes that the result will be a closer approximation to equilibrium than the present situation, he can be more assured of a reaction favorable to the innovation.

In either case he can get some idea of the possible types of adaptive behavior to be expected by comparing the alternatives listed in the preceding chapters with his experience of previous behavior of the group, by questioning which source of suggestion the men customarily utilize, and estimating the probable type of suggestion which will come from that source.

Consider one other example of a potential use for this framework for the study of human relations. A company, let us say, wishes to conduct a course in human relations for its foremen, or a union wishes to conduct such a course for its stewards. What type of course would a consideration of this framework for study suggest? The following steps would be consistent with and make use of the framework as developed in the preceding pages:

1. Introductory sessions emphasizing the fact that an organization is a small society, what the nature of a society is, the way in which the character of the Structure of Living in a society affects behavior of its participants.
2. Exploration by the foremen or stewards in the class of the character of the Bonds of Organization (Organizational Charter, and the systems of Functional Specifications, Status, Communication Rewards and Penalties, Technology, Services, Education, Thoughtways) as actually experienced by them, by their immediate superiors, and by employees or members in the company or union.
3. A consideration of how these Bonds as experienced might affect the realization by those groups of the Goals listed, i. e. a shaping of questions by which to test the adequacy of each Bond in terms of its potentialities for affecting goal realization or frustration.
4. The application of these tests to the Bonds as existing in their departments.
5. A consideration of specific problems of human relations which have arisen in the plant or union in the light of the preceding analysis.

It is probable that in thinking systematically about the situation with which they are familiar, they would learn more about human motivation and the way it is affected by the social environment within which men work, and consequently would develop a more useable understanding of why they and those with whom they work behave as they do, than by the mere reading of assignments in textbooks. There is no reason, of course, why both stimuli to thought and learning should not be used simultaneously.

Another application might be suggested relative to an analysis of "the foreman problem." Specifically, management leaders are wondering how they can make and keep foremen a part of management. Some unions are wondering how they can organize foremen. The objectives of each are inconsistent, but we might well diagnose their problem with the use of the same basic questions suggested by the framework here presented, and by reference to information gathered from the foremen themselves. What are these questions?

1. At a time when foremen were, in fact and in attitude, unquestionably a part of management -
 - a. What were their qualities, abilities, and identifications as people?
 - b. What was their role in the organization as defined by their relationship to the following aspects of the Bonds of Organization:
 - (1) Technological and Service processes.
 - (2) Nature and scope of their Job Specifications and their place in the work-flow.
 - (3) Source and scope of their authority in the Status system both in its directive and representative aspects.
 - (4) Position in the route, authentication and control of Communications.
 - (5) Character of Rewards and Penalties particularly with respect to instruments of pay and progress, agents, and the source of their power.
 - (6) Their position as rewarders and penalizers, particularly with respect to instruments available to them and other sources of their power.
 - (7) Their position as human symbols of the organization.
 - (8) Thoughtways, particularly the decision making process and research.
 - (9) Educational system.

2. At the present time what is the role of the foremen in all these respects (a, b (1)-(9), above)?
3. Assuming that foremen have the Goals or standards of successful living listed, does the present situation provide more or less frustration with respect to these Goals? Which ones? What aspect of the Bonds of Organization are adequate or inadequate from this point of view?
4. Are there inconsistencies among any of these aspects of the Bonds of Organization? Are any of them inconsistent with their stock of Ideas, or with Reinforcements used to support expected behavior?
5. Are there rigidities in any of the aspects which are retarding adjustment among the parts of the Structure of Living?

Having made such a diagnosis, higher management might then well ask whether the present foreman's role, as defined by experience, actually coincides with the distinctive features of a "managerial" role in all its aspects. If it does not, the use of the reinforcing slogan, "They are a part of management," just rubs the frustration in. They attain a role by behavior, not by being labelled. Can the Bonds of Organization be modified in such ways as to make experienced reality and slogan consistent? What are the sources and types of suggestions for adaptive behavior foremen are likely to accept and follow?

Having made such a diagnosis, a union leader might well ask whether experimental adaptive behavior in the form of union organization on the existing pattern, would restore adequacy, consistency, and flexibility to the foreman's Structure of Living and the satisfactory character of his role as defined by it.

Conclusion

It should be obvious that the framework for study and the set of relations set forth in the foregoing chapters does not provide a simple formula which can be applied quickly to the interpretation of any observed behavior or to the prediction of anticipated behavior. The propositions are relatively simple, but the data which must be studied are many and complex. No one would think of trying to manage an oil field, or a factory, or a ship by an engineering theory which required only casual observations and calculations. Why should he expect to manage human relations, involving the most complex elements in human nature and the environment which shapes it, by the use of a theory which requires only casual observations and calculations?

To anyone faced with the task of explaining or predicting behavior with respect to a particular issue, however, the facts needed may appear to raise a

staggering number of questions. He is likely to throw up his hands and say, "Eternity itself would not provide time to answer all of these adequately. Long before that, the time for action would have passed. I have to decide my course of action today, tomorrow, next week, a month from now. Reduce the number to manageable proportions."

The practical man is right. But let us not discount too quickly the value of the more systematic diagnosis. Snap judgments are time conserving - IF they are right. There was a time in medical practice when diagnosis was simple. It still is in primitive societies. If a man has a stomachache or an earache or a paralysis of the left side, it is because he has a devil in him. Ritualistic means are devised for getting the devil out. Not unrelated to that diagnosis, but making use of some advance in the knowledge of the human body, was the diagnosis of too much or poorly distributed blood. The simple remedy was bloodletting. I suspect that medical practitioners of these earlier days would have been staggered by the data and theory required now for intelligent diagnosis and treatment of the simplest ailments.

But a beginning must be made. And if knowledge and wisdom are to be cumulative, it is desirable to have a pattern for thinking into which the nature and significance of each new observation can fit. Systematic and growing understanding of complicated details is not impossible. The period for exploration of the relevant facts, for instance, varies. Some decisions can wait upon a careful study of the circumstances that will determine human reactions, and are so important that such exploration will pay dividends. In other cases intuitive immediate action is more important than deliberative postponed action.

Although a doctor may be aware that reaction to an operation will depend upon the whole structure and dynamics of the body, the need for the operation may be so acute that an elaborate charting of that structure and dynamics would involve time which cannot be spared if the patient is to live. Nevertheless, his science is sufficiently well organized so that he is aware of the major facts he has to get before proceeding, those that are vitally related to the present ailment. But the status major is established, not by guess work, but by a long process of comparative and systematic study of the relative significance of a great range of potential factors in the diagnosis of a particular ailment. The theory of physical structure and functioning is sufficiently adequate to enable the doctor to run over quickly the important things he must know and the reactions he can expect in the light of that information. Because his pattern of analysis is relatively stable, the experience he gains in this new situation can be fitted into that pattern. His experience is cumulative, and his next case is attended by a man whose understanding of the principles of physical reaction has become more nearly adequate.

The framework presented in this book and the terms it contains might be called a guide for learning, a pattern for investigation or diagnosis. Even as a check list of matters to be taken into account, as a roster of possible factors which may influence behavior, it should prove useful. If considered in each recurring situation as a supplement to what the diagnostician is trained by experience to look for, the study and thought, however limited, should produce a

cumulative understanding, making future action, though based on quick intuition, more effective.

Moreover, problems vary in the items of information which are particularly important for their solution, so that dominant attention in a practical situation can normally be focused on less than the whole roster of facts involved. As an understanding of the nature and interaction of the several parts of the Structure of Goals, Resources, Social Behavior, and Reenforcements increases, judgment as to what is relevant and significant for the solution of any particular problem will be improved.

I have one further comment to make on the importance of a commonly accepted and used theory of adaptive human behavior. There are many examples of successful operation on the part of management and union leaders in producing a healthy situation in industrial relations. The examples of failures are equally numerous. How can those who succeed and those who fail transmit the reasons for their success or failure to others? Such transmission is the essence of education, the essential factor in progress. Men can learn from each other and act accordingly if they share a common pattern of analysis and use the same terms.

Until they achieve that common language, progress toward industrial peace and efficiency in human relations will be accidental. It will depend on the presence in the situation of an exceptionally sensitive and wise and experienced individual who is intuitively aware of the principles of human behavior. The most important tool for making progress orderly and cumulative is a theory of adaptive behavior which can be put to practical widespread use. If commonly used, every user becomes the head of a laboratory in which that theory is corrected by experience and becomes a tool sharpened for future use in solving the most complex of all human problems, "Why do men, or most men, behave as they do? How can the causes of desirable behavior be perpetuated? How can the causes of undesirable behavior be eliminated?"

APPENDIX

Note on Development of Structure of Living

The fact that we have resorted to two dimensional diagrams in describing the Structure of Living may cause some readers to conclude that we have defined its elements in static terms. Such is not our intention, though our exposition may have created that impression.

A most obvious fact to any one who would learn, from people of a society, what Structure of Living they now experience, is that men have memories and anticipations, and the present Structure has a history and a future. The influence of this fact has not been clearly demonstrated in relation to the conception of the nature of the individual and social behavior presented above. Some applications are clear. Reenforcements for social behavior such as traditions, folklore, philosophy, faith, etc., clearly not only have a past but in many cases represent the past. But the Resources and Bonds themselves are also experienced as "things with a history and a future." Theoretically if we could assume two organizations identical at a particular date with respect to all items in the Structure of Living, then assume that the identical Status systems had been inaugurated in one organization twenty years ago and in the other twenty weeks ago, we would expect the behavior of participants in those two organizations in response to their Status system to be different. Or if we were to assume the time dimension identical in both cases, and consider that the existing Status systems were initiated, one through peaceful and friendly and reasonable negotiation, and the other as the settlement of a long and bitter strike, we would anticipate a dissimilar reaction to that system on the part of those in the two groups. In their respective experiences what would appear to an outsider as identical Status systems, are different, for the age and circumstances of development of the systems are different. Both of these factors enter into the conceptions held of the present systems.

This is a problem for careful exploration. Investigations of the "history" of an element in the Structure of Living to date have suffered because study of the effect on behavior of accomplished or prospective changes in that element, have not been made in a setting of the whole Structure of Living, the other elements in which remain relatively stable but which are under constant strain to adapt to changes in any single part. Moreover, the changes have not been recorded in terms of their nature and meaning in the eyes of those whose behavior it is desired to explain.

All that we can say at the moment is that a participant's stimulus to action arises from the present condition of his Structure of Living in the face of a particular problem, but that his present definition of any part of the Structure of Living would be in some such terms as this, "This bond (say the Status system) in our organization has these characteristics . . . which have developed from the following changes which have taken place in the Bond during the period of my participation in the group and which will probably be modified by further

changes in prospect." That is, his conception of the Bond is built up out of present and past activity and experience, and anticipated future activity and experience. Yet there is a present conception of the nature of the Bond, though the conception may be colored by memory and anticipation. And this present conception is the fact that influences today's behavior.

Our problem is to devise descriptive categories which will enable us to describe the elements of the Structure of Living* as having a time dimension backward and forward. But these time dimension categories must not be merely records of past facts or statements of future probabilities in objective terms. Just as we have emphasized that the present aspects of the Bond influencing behavior is that Bond as presently experienced, so the past and future aspects of that Bond influencing behavior are those aspects as presently remembered and anticipated.

Fully recognizing the validity of the position of those who insist that a time dimension be given to the description of a current Structure of Living which is used in understanding men's behavior, we must also take note of the fact that many who attempt to provide this time dimension have over-simplified the problem. The students of human behavior have amply demonstrated, I believe, that we must interpret responses to present facts of societal structure as responses to those facts as experienced by the people whose behavior they are trying to explain. They have not, however, as consistently indicated that the relevant history or future of these facts of societal Structure is that which records them as remembered or anticipated by the people who react to them or use them. How frequently they premise their discussion with a chapter on "history" and conclude with a chapter on the "future." The first chapter is a record of objective developments. The last is either sheer prophecy concerning, or an analysis of what "ought to be" the response in terms of probable objective developments.

This process is too easy. The trouble in interpreting the effects of the "history" of the existing Structure of Living on present behavior arises in large from the failure to define history as "remembered" history. The authors of "1066 and All That" come closer to a description of history that influences behavior than some of their more illustrious colleagues. "History," they said, "is not what you thought. It is what you remember." They might have added, "The future is not what will happen, but what you anticipate will happen."

All of this is said, not to discount the services to human understanding either by objective historians of particular organizations or by prophets. The purpose is simply to indicate that the social scientist, trying to explain why people do or must behave as they do, cannot explain or predict behavior as an

*It should be noted here that we are discussing the development of elements in the Structure of Living, not of the ultimate problems for the solution of which this Structure suggests and reinforces behavior and provides resources.

automatic response to past, present, or future objective facts; for people behave on the basis of their present comprehension and interpretation of those facts.

It is no wonder that many "historical introductions" to investigations of current behavior within a given Structure of Living are left dangling at the beginning of the book without ever being referred to again. Even if he wanted to, having merely recorded objective events, the author would find it difficult to connect his introduction meaningfully with his conclusion. Faced with an obstacle residing in his failure to describe history in terms of experienced and remembered history, he falls back on such generalizations as, "These facts furnish the background for, or provide the setting for, or explain (!!!), or are essential to the understanding of, the present situation." Why? How? How do you know? Are human beings automaton responding to objective facts? Or are they persons responding to facts as they understand them? The asking of such questions would cause many a social scientist to premise his chapters on "history" with some such statement as, "I am writing this because present facts of societal structure are a part of the stream of history. I'm not sure what these historical developments mean to the people whose behavior I am describing and trying to explain. I'm sure they must have some effect on their behavior; just what I do not know. In any case the standards of my trade and my own personal convictions require that I recognize the importance of history. Hence this chapter."

I happen to be a social scientist who recognizes the validity of the last statement, both because I feel the compulsions arising from my academic "Structure of Living" and because personally I consider those compulsions sound and significant. I am not aligning myself with a famous American who declared, "History is bunk," though I suspect that he and I had somewhat the same problem in mind. But I cannot over-emphasize the fact that, in the interpretation of human behavior, the observer of that behavior and the analyst of its causes cannot delegate his responsibility to the historians or the prophets. Past and future facts contribute to the definition an individual (or group) gives to a presently experienced fact. Historians and prophets have not recorded their data in terms of remembered or anticipated facts which are the ingredients of the individual's definition of his present Structure of Living, a definition which suggests his appropriate current reaction and behavior.

In our descriptions of the Structure of Living which have their impact on observed behavior, neither I, nor any member of the staff of the Labor and Management Center, has given adequate attention to the time dimensions of the definitions given by individuals of the elements in their present Structure of Living. This is an inadequacy to be corrected in future investigations. By the above comments I am not attempting to challenge the adequacy of the data or methods of historians or prophets for their own purposes, or with reference to matters other than those of societal structure. I am merely stating that their data and methods are not adequate for the interpreter of current social behavior, and acknowledging that, so far, those of us engaged in that activity have not succeeded in satisfying the requirements of our own science.

152228

3990 088



University of
Connecticut
Libraries
